NOVARTIS AG
Form 6-K
February 25, 2002

Use these links to rapidly review the document
CONTENTS

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 22, 2002

Novartis AG

(Name of Registrant)

Lichtstrasse 35
4056 Basel
Switzerland

(Address of Principle 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 / /

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 / / No /x/

Enclosure: Novartis Annual Report 2001

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Novartis AG

Date: February 22, 2002 By: /s/ RAYMOND BREU

Name: Raymund Breu
Title: Chief Financial Officer

CONTENTS

www.novartis.com/annualreport2001

NEWS IN 2001

Double-digit sales growth achieved: Group sales up **14%** and Pharmaceuticals up **15%** in local currencies, respectively **10%** and **11%** in Swiss francs

Operating and net income from continuing activities at new **RECORD LEVELS**

Second **SHARE BUY-BACK PROGRAM** completed

Geographic **EXPANSION:** USA accounts for 43% of Group and Pharmaceutical sales (up from 40% and 38% respectively in 2000)

Successful focus on **PHARMACEUTICALS**

- Strong sales growth: up 15% worldwide and 24% in the USA in local currencies
- *Diovan*: fastest growing product in its category, leadership position in the US market
- *Glivec/Gleevec*: revolutionary treatment in chronic myeloid leukemia discovered and developed by Novartis scientists, approved and launched in record time
- For the second year in a row higher number of new drug approvals in the USA than any competitor: *Foradil* (asthma), *Glivec/Gleevec* (CML), *Zometa* (hypercalcemia of malignancy) and *Elidel* (eczema)
- 15 product approvals obtained worldwide
- 11 registration dossiers submitted worldwide

SOCIETAL, HUMANITARIAN and **ECOLOGICAL** commitment

- *Glivec/Gleevec*: innovative pricing arrangement for the uninsured or less well-off patients
- *Care Card*: discount program launched in the USA for needy elderly patients
- Support for patients in developing countries: anti-leprosy and anti-malaria treatments supplied free of charge or at cost to the WHO
- New research institute in Singapore with focus on neglected diseases in developing countries

---

Financial Highlights[1]

Key ratios

	2001	2000
Return on sales (%)	21.9	22.4
Return on average equity (%)	17.8	17.6
Group research and development as (%) of sales	13.1	13.8
Debt/equity ratio	0.18:1	0.16:1
Current ratio	2.4:1	2.8:1

Share information[1]

	2001	2000
Average number of shares outstanding	2 571 673 365	2 613 547 597
Earnings per share from continuing activities (CHF)	2.73	2.49
Operating cash flow per share (CHF)	2.85	2.91
Dividend per share[2] (CHF)	0.90	0.85
Pay-out ratio based on outstanding shares (%)	33	30
Share price at end of year (CHF)	60.00	71.63

1 Adjusted for 40 to 1 share split on May 7, 2001

2 2001: Proposal to the shareholders' meeting

Pharmaceuticals

Committed to improving health and quality of life by focusing on the discovery, development, manufacture and marketing of innovative prescription medications.

		2001[1]	2000[1]	1999
Sales	CHF m	20 181	18 150	15 275
Operating income	CHF m	5 677	5 401	4 676
Research and development	CHF m	3 447	3 311	2 848
Free cash flow[2]	CHF m	6 663	6 372	4 631
Net operating assets	CHF m	13 144	12 410	10 690
Number of employees		41 256	38 397	35 721

1 Including Ophthalmics transferred from CIBA Vision

2 Before acquisition of product and marketing rights

Generics

Provides high-quality, off-patent pharmaceutical products and substances at competitive prices.

		2001	2000	1999
Sales	CHF m	2 433	1 973	1 823
Operating income	CHF m	281	242	347
Research and development	CHF m	169	170	126
Free cash flow	CHF m	46	152	176
Net operating assets	CHF m	2 622	1 939	1 891
Number of employees		7 230	5 712	5 451

Consumer Health

Dedicated to maintaining and improving the health and well-being of consumers and patients at home or in hospitals by fulfilling their nutritional and self-medication needs.

		2001	2000	1999
Sales	CHF m	6 675	6 514	5 570
Operating income	CHF m	920	869	807
Research and development	CHF m	181	186	167
Free cash flow	CHF m	640	506	569
Net operating assets	CHF m	2 528	2 284	2 098
Number of employees		12 824	12 949	12 254

CIBA Vision

Works to improve, protect and preserve the eyesight of people around the world by providing the best products and services for vision correction and ocular health.

	2001[3]	2000[3]	1999

		2001[3]	2000[3]	1999
Sales	CHF m	1 787	1 392	1 632
Operating income	CHF m	174	100	250
Research and development	CHF m	98	67	144
Free cash flow	CHF m	59	105	160
Net operating assets	CHF m	2 310	2 345	792
Number of employees		6 797	7 644	6 041

[3] Excluding Ophthalmics transferred to Pharmaceuticals

Animal Health

Focuses on the well-being of companion animals and on the health and productivity of farm animals.

		2001	2000	1999
Sales	CHF m	962	1 083	927
Operating income	CHF m	138	179	216
Research and development	CHF m	93	88	65
Free cash flow	CHF m	195	173	146
Net operating assets	CHF m	572	644	461
Number of employees		1 997	1 975	1 499

Letter from Daniel Vasella

Dear Shareowner

In 2001, our strategy of focusing on healthcare and, in particular, on the pharmaceuticals business and the US market proved successful. Group sales, net income and free cash flow all reached record levels, adjusting for the spin-off of our agribusiness operations. I would like to summarize the key points as follows:

Double-digit growth was achieved in group sales, which totaled CHF 32 billion (+14% in local currencies).

Free cash flow was up 25% to CHF 4 billion.

Net income rose 8% to CHF 7 billion, and earnings per share increased by 10% to CHF 2.73.

15 pharmaceutical product approvals were obtained around the world an industry-leading achievement.

11 registration dossiers for new drugs and indications were submitted for regulatory approval.

Pharmaceutical sales jumped 24% in the USA, making Novartis one of the fastest-growing major pharmaceutical companies there. Altogether, the US market accounted for 43% of global sales.

Our cardiovascular franchise was successfully expanded, thanks mainly to *Diovan,* which is now our top-selling product, and *Lotrel.*

Innovative anticancer drugs were launched: *Glivec/Gleevec,* a revolutionary new treatment for chronic myeloid leukemia; *Zometa,* for hypercalcemia of malignancy; and *Femara,* with its expanded indication in the treatment of advanced breast cancer.

Innovative pricing arrangements were introduced for *Glivec/Gleevec,* with substantial reductions or even free supplies for uninsured and less well-off patients. In addition, a discount program was launched in the USA for needy elderly patients lacking coverage for medicines.

The Group provided further support for patients in developing countries by supplying leprosy drugs free of charge and by selling *Coartem,* our new antimalarial treatment, to the WHO at cost. In addition, we pledged to donate drugs for tuberculosis to the Global Fund launched by Kofi Annan. Novartis also established a research institute in Singapore with the mission of discovering new treatments for neglected diseases in developing countries, focusing initially on dengue fever and tuberculosis.

Net financial income exceeded CHF 1 billion, despite the difficult stock market conditions. The Group acquired 21.3% of the voting shares in Roche.

The structure of our Board of Directors was modernized, and corporate governance was aligned with international standards.

Despite the difficult economic climate and the delays in getting approval for two of our new products, we managed to achieve good overall results. I would like to take this opportunity to thank all of our associates, whose commitment and pursuit of common goals worldwide have made these considerable achievements possible.

However, looking back at the year that has passed, I find it impossible to restrict my comments just to our company's performance; I have to mention the events of September 11, which shook the world. The attacks which brought death, suffering, mourning and war in their wake revealed not only the ruthlessness and fanaticism of the perpetrators, but also the vulnerability of the civilian

population and the determination of the USA and its allies to fight against terrorism. We do not know how many years this conflict will last, nor what proportions it might assume.

After a decade that saw the rise of free-market principles and growing globalization, there are now increasing calls for the state to exert a greater regulatory influence. It is impossible to ignore the voices demanding that support be given to the disadvantaged, especially in developing countries. Materialism and military-technological power in some countries contrast with the mass adherence to religious often fanatical beliefs that are apparent in other regions of the world. Fanaticism of this kind often lifts its followers above economic and technological disadvantages, deprivation and envy by purporting to offer eternal truths and the prospect of rewards in Paradise. For some, it legitimizes behavior that violates the fundamental values of human society.

People in industrialized nations also have a yearning for purpose, permanent values, and spirituality, especially when faced with human tragedies, such as the one we experienced in Switzerland, when 14 people were murdered in the Parliament building in the town of Zug.

Amid all this, questions are being raised about the role within society of companies such as Novartis. Our justification and purpose are derived from the nature of the products that we discover, develop, manufacture and sell. These are designed to prevent or cure disease, limit its course, or at least alleviate human suffering and improve patients' quality of life. Provided that our products can offer an advantage over those of other companies, they will be in demand and customers will be prepared to pay a price that more than covers our costs (including capital investments). This enables us not only to generate profits for our shareowners, but also to reward our staff and pay our taxes.

As a global company, we are increasingly being called upon to assume additional responsibilities: new moral demands are being issued and ethical standards set. These tenets mandate that cheaper medicines be made available, particularly for the elderly and for patients in developing countries. There is growing pressure to develop new drugs for diseases such as malaria and tuberculosis, which receive scant attention due to lack of economic incentive, since many patients with these diseases cannot afford the healthcare and medicines they require. Some people argue that, in view of the needs of developing countries, intellectual property rights should be discarded and cheap generics substituted for innovative

patented products in these markets, or that state intervention e.g. in the form of price reductions should be permitted.

Given the scale of these problems, the private sector and the pharmaceutical industry in particular is not in a position to resolve them single-handedly. Instead, the responsibility for addressing these issues lies primarily with each nation, its institutions and, ultimately, its citizens.

As a company, we are able and willing to make a contribution. Thanks to the success of our business in 2001, it was possible for us once again to support needy and financially disadvantaged patients and to launch new initiatives for their benefit. We are also systematically assuring our worldwide compliance with the commitments we undertook in signing Kofi Annan's Global Compact on human rights, labor rights, and environmental protection.

Over the past decades, the pharmaceutical industry has provided an ever increasing contribution to the health and well-being of countless patients. Infectious diseases can be treated with antibiotics, certain types of cancer can be cured, people with mental illnesses can be reintegrated into society, and great strides have been made in cardiovascular medicine. But this has only been possible because pharmaceutical and biotechnology companies have operated professionally and have been successful and prosperous. But the balance is fragile. Drug discovery and development is a lengthy process, and 12-15 years normally elapse before a new drug can be marketed. The failure rate and hence the risk is high: only 1 in 10 000 substances becomes a marketable product. Commercialization demands major investments to ensure adequate and rapid market penetration. If there is no prospect of an appropriate return which cannot be guaranteed in the absence of patent protection and fair pricing

companies can neither invest in the future (i.e. in the research and development of new medicines) nor recruit or train talented researchers. Ultimately, the implications for society as a whole would be devastating.

In most markets, the pharmaceutical industry operates in a heavily regulated environment, with the government determining which drugs are approved and frequently, how much they should cost. This means that authorities have a special responsibility to make decisions that balance short-term budgetary constraints, the health of the population and the interests of long-term innovation.

Despite the vigorous debate and necessary adjustments, we should not forget that liberalization and globalization stimulated a robust 10-year economic growth in many countries, from which poorer nations also benefited. I am confident that society and its decision-makers will continue to include the principles that facilitated this development in their decisions.

I would like again to thank you, our shareowners, for your loyalty and confidence.

/s/ Daniel Vasella

Sincerely,
Daniel Vasella, MD
Chairman and CEO

AND THEN THERE WAS *GLEEVEC* *...

* *Gleevec* in the USA and *Glivec* in the rest of the world

By Dr. Lisa Melton, Science Writer in-residence at the Novartis Foundation, London

Charles Schiffer, MD, has encountered just about every manifestation of cancer in 30 years as a cancer researcher and as a Professor of Medicine and Oncology at the Karmanos Cancer Institute, Wayne State University School of Medicine in Detroit. Many times he has seen the oncological community embark on clinical adventures with promising new "wonder drugs", only to discover shrinking response rates and new side-effects as the use of the new drug expanded.

So, Dr. Schiffer was cautiously optimistic at best when he started his first patients on *Gleevec.* But it soon became apparent that this new drug was like none other before it. "In the beginning, my colleagues and I would sometimes catch ourselves smiling. We saw our patients' diseases and their symptoms melt away in front of our eyes. It was amazing."

Gleevec, a product of the research program at Novartis Oncology, was taking the oncologists' establishment by storm. Physicians who witnessed what this tiny orange capsule also known by the unprepossessing name of STI571, or imatinib mesylate, could do admitted it was like nothing they had experienced before. The mood was euphoric. "In medicine, there's nothing that's more fun than to see terribly ill patients rapidly getting much, much better," says Dr. Schiffer, recalling his experience during that initial stage.

Since then, thousands of patients with chronic myeloid leukemia or CML have responded to the treatment and some have gone into remission. CML is a cancer in which white blood cells multiply out of control. If left untreated, it is usually lethal, although at the start of the disease people hardly feel ill at all. Symptoms are tiredness or discomfort in the abdomen. This chronic phase can last five to seven years before the disease takes a turn for the worse.

EFFICACY DATA

What *Gleevec* achieves (based on results from phase II clinical trials)

Chronic phase CML: 88% of patients have a hematologic response 49% of patients have a cytogenetic response

Advanced CML: 21% of patients have a major cytogenetic response

Myeloid blast crisis: 14% of patients have a major cytogenetic response

RATING OF THE THERAPEUTIC POTENTIAL OF *GLEEVEC*

Response = profound and sustained in most cases

Rapid effect = patients' conditions improve in less than one month

Easy to administer = *Gleevec* is taken orally

Side-effects = few and generally mild

Relapses = few (but still early days)

Once patients reach the so-called 'blast crisis' phase, the numbers of white blood cells are hundreds of times the numbers found in healthy people. At this stage, the disease becomes life-threatening and most patients do not survive longer than 6 months. The only cure for CML is a bone marrow transplant, but the procedure involves radiation and chemotherapy and there is always a

chance that the transplant might fail. As a result, mortality is staggeringly high as many as 40 per cent of people may die within weeks of the procedure. With *Gleevec,* there is no surgical risk and the response rates are impressive.

Symptoms in some patients virtually disappear, especially if treatment begins during the less deadly chronic phase.

But Dr. Schiffer warns that it is still too early to say whether *Gleevec* is a long-term cure for CML. The drug simply has not been around for long enough. There is also a chance that patients may have to continue taking the drug for the rest of their lives, possibly combined with other therapies, to avoid the leukemic cells from bouncing back. And unfortunately, *Gleevec* does not work its magic on every CML patient, because some can become resistant to the drug and relapse.

In the firing line

Despite these caveats, *Gleevec* is still a breakthrough not only has it given scores of patients the chance to live a longer and better life but it heralds a new era in cancer therapy. "For me, *Gleevec* is like the first penicillin," says Prof. Alois Gratwohl, head hematologist at the Kantonsspital in Basel, Switzerland. *Gleevec* represents a completely new strategy it is the first medicine in the world to have been tailor-made for a specific pathogenic molecule.

Gleevec blocks a protein which acts as a messenger signalling cancer cells to multiply. This targeted approach is a completely new way of treating cancer because while the drug homes in on leukaemia cells the body's healthy cells are left untouched. This attack on cancer cells is a far cry from the strategy of traditional treatments like chemotherapy that blast cancer cells but also affect healthy cells, often leaving patients with debilitating side-effects. As *Gleevec* fires predominantly at cancer cells, the drug is generally well tolerated and only a few patients experience mild to moderate side-effects.

Serendipity played no part in this therapeutic coup. *Gleevec* is the result of more than 30 years of cellular research in CML coupled with the foresight and creative thinking of scientists at Novartis Oncology led by Dr. Alex Matter, Head of Oncology Research. The quest to understand what goes awry in CML began in the 1960s, when scientists identified an unusual chromosome in patients' cells which they named 'the Philadelphia chromosome' after the city in which it was discovered. It was the first instance of defective genetic material being identified as a cause of cancer.

The Philadelphia chromosome turns white blood cells cancerous because two chunks of genetic material from two different chromosomes swap places and one crucial gene ends up in the wrong place. This genetic abnormality in the Philadelphia chromosome creates an enzyme known as Bcr-Abl that is unique to CML. The Bcr-Abl enzyme belongs to a family of molecules known as tyrosine kinases that normally act as 'on-off' switches in cell signaling. But in CML, this kinase is jammed in the 'on' position, triggering white blood cells to multiply too fast and too soon. The consequence is an overproduction of immature leukemic cells the symptom that characterises leukemia.

The decision to try to disrupt this enzyme gone awry was visionary thinking. In the 1980s Novartis started a research program to investigate medicines which might selectively inhibit the Bcr-Abl kinase. Almost a decade later, scientists had identified one promising compound, but its effect was disappointingly weak. It took two more years of painstaking experimentation to tweak this promising molecule into a potent and specific inhibitor for the Bcr-Abl kinase. By April 1999, *Gleevec* was being given to 31 patients who had failed every other treatment in a clinical trial. Soon after, the news of the results was spreading like wildfire amongst oncologists and patients alike.

Difficult decisions

A diagnosis of leukemia is a terrible blow for patients, and oncologists are also painfully aware of the tough choices that people with CML will have to face regarding therapy. "We tell patients that we

have two different bits of news," explains Prof. Gratwohl. "We have to tell them that it is a bad disease with the likelihood of a fatal outcome. But at the same time that it is one of the leukemias where there are several treatment options. We might combine them, or use one after the other, but we tell them that there is hope."

Yet none of the traditional therapies are ideal. Chemotherapy with hydroxyurea is a relatively crude weapon to fight leukemia. It will keep white blood counts under control but does not eliminate cancer cells, so life expectancy is low at 3 to 5 years. The standard option today is alpha interferon (IFN) which, if taken from the beginning, can extend life expectancy for a minority of patients for up to 10 years. But IFN has debilitating side-effects such as fever, pain, and mental disturbances such as depression and fatigue. Patients feel wiped out, they eventually abandon their jobs and their quality of life plummets.

Most physicians would agree that the best option is a bone marrow transplant because, if successful, it rids the body of the disease completely. Yet transplants pose the biggest conflict because the risk of immediate death is very high. Patients, and understandably so, find it

hard to gamble their life on such a risky therapy.

And now there is *Gleevec.* "Every patient comes to the clinic knowing about *Gleevec,* so it becomes a prominent part of the discussion. You clearly have a new option for therapy which is considerably less toxic than interferon," says Dr. Schiffer who acknowledges that for some patients *Gleevec* is a life transforming drug. "It is a magic drug and in some patients it does produce unbelievable responses rapidly and with no toxicity. Staggering. But all that said, we don't know what the long term results are going to be like." Yet Dr. Schiffer admits it is hard to temper patients' enthusiasm for a drug that has, so far, shown such tremendous potential. All it takes is to down a few pills every day for symptoms to vanish. For many CML patients *Gleevec* is hope where none existed before.

Reproduced with Permission of The American Society of Hematology Slide Baknk, (3rd edition)

A race against time

Patients' clamor for Gleevec began in spring 1999, as soon as the results of the first tests on CML patients spread. Thanks to the Internet they were aware of the drug from its early stages of development, and support groups and sites dedicated to CML rapidly disseminated the news. And the news was indeed remarkable: the new drug worked in every patient. In all 31 participants who had taken part in the Phase I trial, the number of leukemic cells in the blood dropped, known in medical parlance as a 'complete hematologic response', and one third had a 'complete cytogenetic response' which means that the Philadelphia chromosome disappeared. The Philadelphia chromosome is present in all CML patients so it is taken as a marker of the disease.

Patients were betting their lives on getting the pills before it was too late and, through letters and petitions to Novartis, expressed their desire to get access to *Gleevec.* Faced with this extraordinary situation, the Group's management took a momentous decision: to make this drug available in ample supply and without delay.

To push the drug forward into industrial-scale production was a significant business risk. It would call for some up-front expenditure before knowing the results of larger clinical trials. Millions of dollars would have to be pumped in and resources siphoned off from other projects to produce a drug that, if effective, would only treat a relatively small patient population. About 4 500 people are diagnosed with CML each year, so *Gleevec* was no blockbuster drug. But although the commercial potential was by no means clear, Novartis chose to put patients' needs first and speed became the priority.

Sensing that lives were at stake, the development and production teams at Novartis invested their personal time to scale up manufacturing, working evenings, weekends and sacrificing vacations. At the same time, clinical trials around the world were expedited allowing many more patients to participate

and have access to the drug. Fortunately the impressive remission rates from the small initial tests on CML patients were borne out in the larger Phase II and III trials, which encompassed several thousand participants.

In February 2001, a new drug application (NDA) was filed, only 32 months after the first dose in humans, more than halving the typical drug development time of 6 years. Because of its lifesaving potential, the Federal Drug Administration (FDA) granted *Gleevec* a priority review and on May 10, the announcement of its approval was made, drawing a huge amount of public attention. Novartis had succeeded in bringing *Gleevec* to patients in record time: for most drugs, FDA approval normally takes a year. For *Gleevec* the verdict was reached after only 72 days. Novartis is deeply grateful to the American Department of Health and Human Services and to the FDA for making this the fastest drug approval ever.

The clinical trials phase for *Gleevec* was only half as long as the normal drug development process. *Gleevec* was approved in a third of the time of the normal NDA approval process.

The Gleevec era

But now that Gleevec was commercially available, what would happen to those who could not possibly afford it? The world-wide price was set at USD 2 200 a month, a fair price, but one that many people would find insurmountable. Because *Gleevec* is a unique and lifesaving drug it was paramount that it should reach everyone who needed it, and Novartis responded by organizing a patient assistance program in the USA and many other parts of the world.

The idea was to assess the financial resources of each patient so everyone would pay according to their means -the worse off would get the drug for very little money or nothing at all. Novartis selected the following criteria: anyone earning less than USD 43 000 a year received the drug free; those earning between USD 43 000 and USD 100 000 a year would pay no more than 20 percent of their income for the drug, and those earning above USD 100 000 would pay the full price. Parents with children would benefit from further exemptions.

The program was a resounding success. "Novartis should be commended for the decisions they made as to the distribution for disadvantaged people or those with poor insurance coverage," says Dr. Schiffer.

And people like Frank Maliszewski are eager to express their gratitude: "I have been taking *Gleevec* for my leukemia and have had great results. It has made such an improvement in my life. I want to express my appreciation to Novartis for providing me *Gleevec* through the Patient Assistance Program and giving me my life back."

Now the hope is that *Gleevec* might benefit patients with other types of cancer, including solid tumors. The outlook is promising. Scientists from the Novartis Oncology team have seen that *Gleevec*

can inhibit another enzyme, the 'kit' kinase, that gives rise to a relatively rare but fatal form of cancer known as gastro intestinal stromal tumors or GIST. These are solid tumors that invade the digestive system, and for those diagnosed the prospect is bleak since the cancer is often inoperable and there is no known treatment.

With *Gleevec,* the GIST tumors virtually disappear in some patients. Impressive responses were recorded in a small trial with 147 patients with metastatic malignant GIST. The response was rapid and dramatic, with the tumors shrinking within weeks in 72 percent of patients.

But beyond the success story of these little orange pills, *Gleevec* represents new hope for all cancer treatment. It is a revolutionary new paradigm in drug discovery. "The fact that *Gleevec* was designed to target a specific molecule in CML is proven hope that for other cancers, other drugs might come," enthuses Prof. Gratwohl. For the moment, Novartis can take pride in the fact that the *Gleevec* approach has given thousands of people a new lease of life.

Think what's possible.

"One minute I was looking at death. The next, I was looking at my whole life in front of me." Suzan M.

Suzan had been fighting a losing battle against cancer for three long years. By January 2000, she was too sick to continue her studies. She was losing weight, her hair, and at times, her will to live. But today Suzan feels better than ever. And as a result of her experience, she's now pursuing a new degree, and a new career, in molecular biology. Novartis is proud to be the innovative force that's bringing new optimism and hope to patients and their families. No one can promise what the future holds for cancer patients, but today Suzan is winning the fight against her particular form of cancer, enjoying a good quality of life and realizing her dreams.

PHARMACEUTICALS

	2001 CHF millions	2000 CHF millions	Change in CHF %	Change in local currencies %
Sales	20 181	18 150	11	15
Operating Income	5 677	5 401	5	
Research and development	3 447	3 311	4	
Research and development as % of sales	17	18		
Free cash flow[1]	6 663	6 372	5	
Net operating assets	13 144	12 410	6	
Investments in tangible fixed assets	617	534	16	
Number of employees	41 256	38 397	7	

[1] Before acquisition of product and marketing rights

Novartis Pharmaceuticals is a world leader in the discovery, development, manufacture and marketing of prescription medicines. The goal of Novartis Pharmaceuticals is to provide a broad portfolio of innovative, effective and safe products and services to patients through healthcare professionals around the world. This goal is supported by a dedicated, global organization, operating in more than 140 countries through approximately 80 affiliates.

Performance review

Pharmaceuticals achieved sales of CHF 20 181 million in 2001, with year-on-year global sales up 15% in local currencies (+11% in Swiss francs). This excellent performance was a result of dynamic sales in the USA (+ 24%), which accounts for 43% turnover and strong sales increases by the Primary Care, Oncology and Ophthalmics business units.

For the second consecutive year, Novartis obtained a higher number of US approvals for new molecular entities than any competitor.

Glivec/Gleevec the innovative breakthrough treatment for CML (chronic myeloid leukemia) won US regulatory approval in record time. The US FDA also cleared *Zometa* for hypercalcemia of malignancy, *Elidel* for eczema and *Foradil* for both asthma and chronic obstructive pulmonary disease (COPD).

Top ten products

	2001 sales in CHF millions	Change in local currencies %
Diovan/Co-Diovan	1 880	58
Sandimmun/Neoral	1 829	-7

	2001 sales in CHF millions	Change in local currencies %
Cibacen (group)	1 518	22
of which Lotrel	813	48
Lamisil (group)	1 405	19
Aredia	1 270	15
Voltaren (group)	1 066	-8
Sandostatin (group)	816	26
Lescol	814	17
Miacalcic	707	0
Tegretol	683	1

Product review

Primary Care

Primary Care includes a wide range of products for the treatment of cardiovascular diseases, central nervous system diseases and dermatological conditions (including fungal infections, psoriasis and genital herpes).

Novartis expanded its cardiovascular franchise as *Diovan/ Co-Diovan* and *Lotrel* continued to be the fastest growing of the top ten branded anti-hypertensives in the USA. *Diovan/Co-Diovan* became our best-selling product as worldwide sales rose 58% in local currencies. In the USA sales increased 47% as *Diovan/Co-Diovan* passed Cozaar®/Hyzaar® by Merck to capture the leading share of new prescriptions among angiotensin II receptor blockers or ARBs. In addition *Diovan/Co-Diovan* was the first ARB to receive an approvable letter from the US FDA for the additional indication of heart failure, the fastest growing cardiovascular disease worldwide.

Lotrel, the fixed combination of *Cibacen* and a leading calcium antagonist, grew by 48%.

Lescol, a lipid-lowering drug (statin) which offers a favorable efficacy/safety profile, grew by 17% in local currencies.

Lamisil (+19%) is used in the treatment of fungal infections of the skin, nails and scalp. *Lamisil* continued to gain ground in the market mainly due to its ability to kill the fungus, rather than simply prevent further fungal growth.

In the area of central nervous system drugs, *Exelon* (+104%), a treatment for mild to moderate Alzheimer's disease, has continued to grow dynamically, having been approved in all major markets.

Trileptal (+87%), an anti-epileptic for the treatment of partial seizures as adjunctive or monotherapy in adults, or as adjunctive therapy in children, showed strong growth.

Oncology

Novartis Oncology outperformed the market in 2001. In this increasingly important specialty segment, Novartis markets a number of products for use in various cancer settings. *Glivec/Gleevec,* our breakthrough treatment for CML, achieved sales of CHF 257 million in less than 8 months on the market. Regulatory applications were filed in the USA and Europe for the additional indication of GIST (gastrointestinal stromal tumor).

Oncology sales growth in 2001 was supported by *Sandostatin* (+26%), *Aredia* (+15%), and *Femara* (+72%). *Sandostatin* is a synthetic octapeptide derivative of the hormone somatostatin indicated for the treatment of pancreatic and gastrointestinal endocrine tumors, acromegaly, and AIDS-related diarrehea. *Aredia* is a therapy for tumor-induced hypercalcemia, osteolysis from multiple myeloma, and bone metastases from breast cancer. *Zometa,* a more potent bisphosphonate than *Aredia,* has recently been launched in key markets in its first indication "hypercalcemia of malignancy". *Zometa* is in the registration phase for the treatment of bone metastases in a broad range of tumors.

Femara, an oral aromatase inhibitor for the treatment of advanced breast cancer in women with natural or artificially induced post-menopausal status, recently received approval for first-line therapy in most key markets, based upon its superior efficacy over the most widely used previous standard therapy, tamoxifen.

KEY MARKETED PRODUCTS

Therapeutic area	Project/Compound	Generic name	Indication	Formulation
Cardiovascular, metabolism and endocrinology	**Cibacen**	benazepril	Hypertension	Coated tablet
	Co-Diovan	valsartan + HCTZ	Hypertension	Film coated tablet
	Diovan	valsartan	Hypertension	Capsule
	Lescol	fluvastatin	Cholesteriol-lowering agent	Capsule
	Lotrel	benazepril & amlodipine	Hypertension	Capsule
	Starlix	nateglinide	Type-2 diabetes	Tablet
	Zelmac	tegaserod/tegaserod maleate	Symptomatic treatment of Irritable Bowel Syndrome	Tablet
Oncology and hematology	**Aredia**	pamidronate	Conditions associated with cancer	Intravenous infusion
	Femara	letrozole		Coated tablet
	Glivec/Gleevec	imatinib	Advanced breast cancer	Tablet
	Sandostatin LAR	octreotide	Chronic Myeloid Leukemia	Intramuscular
	Zometa	zoledronic acid	Acromegaly, cancer	infusion

Therapeutic area	Project/Compound	Generic name	Indication	Formulation
			hypercalcemia of malignancy	
Central nervous system	**Comtan**	entacapone	Parkinson's disease	Film-coated tablet
	Exelon	rivastigmine	Alzheimer's disease	Capsule
	Leponex/Clorazil	clozapine	Antipsychotic agent for treatment resistant schizophrenia	Tablet, ampoule
	Tegretol	carbamazepine	Epilepsy, acute and bipolar affective disorders	Tablet, chewable tablets, syrup, suppository
	Trileptal	oxcarbazepine	Epilepsy	Tablet, oral suspension
Transplantation	**Neoral/Sandimmun**	cyclosporine	Prevention of graft rejection following organ and bone marrow transplantation.	Soft gelatin capsule, oral solution, intravenous infusion
	Simulect	basiliximab	Acute organ rejection in de novo renal transplantation	intravenous infusion or injection
Dermatology	**Elidel**	pimecrolimus cream	eczema	1% cream
	Famvir	famciclovir	Acute herpes zoster	Tablet
	Lamisil	terbinafine	Fungal infections of the skin and nails	Tablet, cream, *DermGel*, solution, spray
Respiratory	**Foradil**	formoterol	Asthma, COPD	Inhalation capsule (aerosol)
Rheuma, bone and hormone replacement therapy	**Estalis**	estradiol norethisterone	Menopausal symptoms and osteoporosis	Patch
	Estraderm TTS/MX	estradiol	Estrogen deficiency due to menopause	Patch
	Miacalcic	salmon calcitonin	Osteoporosis, regulator of mineral homeostasis and skeletal metabolism	Nasal spray
	Voltaren	diclofenac	Inflammatory forms of rheumatism, pain management	Enteric coated tablet, drop, ampoule
Ophthalmics	**Rescula**	unoprostone	Glaucoma	Eye drop
	Visudyne	verteporfin	Wet form of age-related macular degeneration	Intravenous infusion

Ophthalmics

Visudyne (+127%) continued its dynamic growth and reached sales of CHF 377 million. The product is indicated for the treatment of the wet form of age-related macular degeneration and received approval for additional indications during 2001 in Europe and USA.

Transplantation

Sales of *Sandimmun/Neoral,* the cornerstone of immunosuppression, decreased by 7%, mainly due to increased generic competition in the USA (-20%). *Neoral* sales in Japan grew by 4%, helping to offset part of the generic impact.

The increased use of *Simulect,* a complement to *Neoral* designed to prevent early rejection and to optimize clinical outcomes, resulted in a 24% rise in sales.

Mature products

Voltaren (-8%), a non-steroidal anti-inflammatory agent, continued to face competition from the new generation COX-2 inhibitors as well as generics in the USA. Overall, the rate of sales decline continued to be modest.

Recently launched products and new drug candidates

Foradil (+21%), a long-acting bronchodilator, was approved and launched for treatment of asthma in the USA in 2001 and received approval for the additional indication of COPD. *Foradil* is distinguished by its rapid onset of action and long-lasting effect from a single dose (12 hours).

Starlix was launched in 2001 and belongs to a new class of drugs for the treatment of patients with type-II diabetes, also known as adult-onset diabetes, which affects approximately 6% of the population in the developed world.

Zelmac/Zelnorm is a 5-HT4 partial agonist developed to treat irritable bowel syndrome, relieving symptoms such as abdominal pain, altered bowel movements and possibly bloating. The drug has now been approved in 18 countries including Mexico, Venezuela, Argentina, Colombia, the Czech Republic, Switzerland and Australia. In the USA, following a non-approvable decision, discussions with the FDA are ongoing. In the EU, details on new trials are being reviewed.

Elidel Cream (ASM981) is a cytokine inhibitor for the treatment of atopic dermatitis. Being a non-steroid, it belongs to a new class of agents the ascomycin macrolactams which appear to be suitable for both short- and long-term treatment. *Elidel* is one of the first new treatments for eczema since topical corticosteroids were introduced almost 50 years ago. With regulatory reviews in progress elsewhere, *Elidel* gained marketing approval in the USA for mild to moderate atopic dermatitis in patients aged 2 years and older. An oral form also is in development.

COX189, a new drug candidate, is a highly selective and potent inhibitor of the COX-2 enzyme. The compound is in Phase III clinical trials. Target indications include osteoarthritis, rheumatoid arthritis and pain.

Xolair (omalizumab), another new drug candidate, is an anti-IgE monoclonal antibody intended for the treatment of allergic disease, irrespective of allergen, by normalizing serum IgE. The drug is being developed in partnership with Genentech and Tanox for the treatment of allergic asthma and seasonal allergic rhinitis. In July 2001, the FDA requested additional pre-clinical and clinical data analyses for *Xolair,* as well as pharmacokinetic information. Novartis will provide additional data to the authorities and a resubmission between late 2002 and early 2003 is anticipated.

Compounds in development

The Novartis pipeline represents a broad stream of promising future products, with 50 projects in Phase II and beyond as of December 2001, including both new molecular entities and additional indications or formulations for marketed products.

Compound

Molecular chemical entity.

Generic name

Designations assigned to compounds.

Indication

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

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.

Filed

In registration.

*
Outlicensed to Speedel, call-back option for Novartis.

**
Navigator trial examining combination therapy of *Starlix* and *Diovan*.

Therapeutic area	Project/Compound	Generic name	Indication
Cardiovascular, metabolism and endocrinology	**SPP100***		Hypertension
	LAF237		Type-II diabetes
	Zelmac	tegaserod	Functional dyspepsia Gastroesophagel reflux disease Chronic constipation Irritable bowel syndrome
	Diovan	valsartan	Congestive heart failure Post- and pre-myocardial infarction
	Navigator**		Progression to type-II diabetes
	Sandostatin LAR	octreotide acetate	Diabetic retinopathy, other indications
	Lotrel 10-20		Hypertension
	Lotrel 10-40		Hypertension
	NKS104	pitavastatin	Dyslipidemia
	Starlix/Metformin		Type-II diabetes
Oncology	***Zometa***	zoledronate	Bone metastasis treatment Bone metastases prevention
	Femara	letrozole	Breast cancer (adjuvant therapy)
	ICL670		Chronic iron overload
	Glivec	imatinib mesylate	GIST (gastrointestinal stromal tumors) Solid tumors
	OctreoTher		Somatostatin receptor positive tumors
	EPO906		Solid tumors
	PTK787		Solid tumors
	PKI166		Solid tumors
Central nervous system	***Ritalin LA***	methylphenidate	Attention deficit disorders
	Clozaril (InterSePT)	clozapine	Suicide prevention
	Iloperidone	iloperidone	Schizophrenia
	Exelon	rivastigmine	Non-Alzheimer's dementia
	Exelon TDS	rivastigmine	Alzheimer's disease
	Trileptal	oxcarbazepine	Neuropathic pain
	TCH346		Parkinson's disease, ALS[1]
	AMP397		Epilepsy
Transplantation, immunology	**FTY720**		Transplantation
	Certican	everolimus	Transplantation
	Myfortic **(ERL080)**	mycophenolate sodium	Transplantation
Dermatology	***Elidel*** **(ASM981)**	pimecrolimus	Inflammatory skin diseases Inflammatory skin diseases
	Lamisil	terbinafine	Tinea capitis
Respiratory	**DNK333**		Rhinitis, asthma, COPD[2]
	Foradil	formoterol	Multi dose dry powder inhaler in asthma "on demand" use (prn)
	Xolair	omalizumab	Asthma/prevention of SAR[3]
Rheuma, bone and hormone replacement therapy	**Zoledronate**	zoledronate	Post-menopausal osteoporosis Paget's disease
	COX189		Rheumatoid arthritis, osteoarthritis, pain
Ophthalmics	***Visudyne***	verteporfin	AMD[4] (occult) AMD[4] (classic) AMD[4] (minimally classic)
	Rescula	unoprostone isopropyl	Glaucoma
	PKC412		Diabetic macular edema

[1] Amyotrophic lateral sclerosis

[2] Chronic obstructive pulmonary disease

[3] Seasonal allergic rhinitis

[4] Age-related macular degeneration

Mechanism of action	Formulation	Estimated filing dates	Phase I	Phase II	Phase III	Filed
Renin inhibitor	oral	2004	*	**		
Dipeptidylpeptidase (DPP-IV) inhibitor	oral	2004	*	**		
5HT4-receptor agonist	oral	2003	*	**		
	oral	2005	*	**		
	oral	2003	*	**	***	
	oral	2003	*	**	***	
Angiotensin-II receptor blocker	oral	filed	*	**	***	****
	oral	2004	*	**	***	
	oral	>2005	*	**	***	
Growth hormone + IGF-1 inhibitor	intramuscular	2004	*	**	***	
	oral	(USA)	*	**	***	****
	oral	2002 (USA)	*	**	***	
	oral	2005 (EU)	*	**		
	oral	2004	*	**		
Bisphosphonate: osteoclast inhibitor	intravenous	filed	*	**	***	****
	intravenous	2005	*	**	***	
Nonsteroidal aromatase inhibitor	oral	2005	*	**	***	
Iron chelator	oral	2004	*	**		
Tyrosine kinase inhibitor	oral	filed	*	**	***	****
	oral	tbd	*	**		
Radiation therapy	intravenous	2004	*	**		
Microtubule depolymerization inhibitor	intravenous	2004	*	**		
Tyrosine kinase inhibitor	oral	2004	*	**		
Tyrosine kinase inhibitor	oral	2004	*	**		
Dopamine-transport blocker	oral	filed	*	**	***	****
Dopamine receptor blocker	oral	2002	*	**	***	
Mixed 5HT2A/D2 antagonist	oral	2003	*	**	***	
Cholinesterase inhibitor	oral	>2005	*	**	***	
	transdermal	2004	*	**		
Voltage dependant sodium currents blocker	oral	2004	*	**		
	oral	>2005	*	**		
	oral	>2005	*	**		
Immunosuppression	oral	2005	*	**		
Growth-factor-induced cell proliferation inhibition	oral	2002	*	**	***	
Inhibition of inosine monophosphate dehydrogenase enzyme	oral	2002 (USA)	*	**	***	****
T cell and mast cell inhibitor	oral	2005	*	**		
	topical (cream)	(EU 2001)	*	**	***	****
Fungal squalene epoxidase inhibitor	oral	2004	*	**	***	
Dual NK1/NK2 antagonist	oral	>2005	*	**		

Mechanism of action	Formulation	Estimated filing dates	Phase I	Phase II	Phase III	Filed
Long-acting beta-2 agonist	dry powder for inhalation	2003	*	**	***	
		>2005	*	**	***	
Anti-IgE monoclonal antibody	subcutaneous	filed	*	**	***	****
Bisphosphonate: osteoclast inhibitor	intravenous	>2005	*	**	***	
	intravenous	2005	*	**		
Cyclo-oxygenase-2 inhibitor	oral	2002	*	**	***	
Photosensitizer for photodynamic therapy	intravenous	2004	*	**	***	
		2002 (Japan)	*	**	***	
		>2005	*	**		
Facilitates aqueous outflow	topical	(EU 2001)	*	**	***	****
Protein kinase C inhibitor	oral	>2005	*	**		

Research and Development

In 2001, Novartis Pharmaceuticals invested CHF 3 447 million in research and development, which represents 17% of total Pharmaceuticals sales. There are currently 66 projects in clinical development, with 16 in Phase I, 22 in Phase II and 28 in Phase III/registration.

The completion of the human genome sequencing project and advances in technologies and computing are changing the way we discover new drugs. Functional genomics at Novartis Pharmaceuticals aims at focusing our discovery efforts on drug targets which are disease-relevant and offer potential for new medicines which prevent or slow the progression of the disease, rather than just treating symptoms. Our genomics research groups are located in Basel, Switzerland, and New Jersey, USA, with further support from the Novartis Foundation for Functional Genomics in California, USA.

Novartis forms strategic alliances and collaborations with other partners in the industry or with academic institutions in order to develop new products, acquire platform technologies and to access new markets. A Disease Area Strategy is in place that focuses on alliances and acquisition activities for key disease areas/indications that are expected to be growth drivers for Novartis in the future. Products and compounds we review for in-licensing are selected and evaluated by the same criteria as our in-house discoveries. Novartis Pharmaceuticals is also working to become the "Alliance Partner of Choice" within the Pharmaceutical industry.

Outlook

The majority of our key marketed pharmaceutical products are in their growth phase and are expected to gain further share in their market segments. In 2002 Novartis will launch *Elidel* (eczema) in the USA and in Europe subsequent to approval.

Novartis will roll out *Foradil* (asthma) in COPD, its second indication, in the USA. *Glivec/Gleevec* will be launched for CML in Japan and major European countries. The approval process for GIST is in progress. We anticipate the approval of *Zometa* in its second indication (bone metastasis) both in the USA and Europe.

In the second half of the year we expect to submit approval applications for COX189, a second generation COX-2 inhibitor for the treatment of pain and arthritis, in the USA and with European authorities. Overall, 28 projects are currently in late-stage clinical development or registration.

As a result of the success of our products in the market and product launches, pharmaceutical sales are expected to increase in the high single-digit to low double-digit range in 2002. The Pharmaceuticals operating margin is expected to be maintained at the previous year's level, barring any unforeseen changes in our business.

DEDICATED TO SERVICE

By Stephen Moore, Head Novartis Pharma Communications, formerly Wall Street Journal, Europe.

The rise of *Diovan* to US market leadership last year among angiotensin II receptor blockers, or ARBs, wouldn't have been possible without dedicated Novartis sales representatives like Doug Rutz, Barbara Munch and Merina Wijaya.

Diovan sales in the USA surged 47% to CHF943 million, fueling 24% overall US sales growth and market share gains for Novartis in the world's biggest, fastest-growing and most profitable market. Doug, Barbara and Merina helped make their team from New Jersey South district one of the top *Diovan* sales units in the country.

That success builds on a bold marketing strategy and a painstaking program of clinical testing. To uncover the full potential of *Diovan,* Novartis is conducting studies involving more than 35 000 patients.

One such study called Val-HeFT the largest ever done in heart failure led to an "approvable" letter from the USA Food and Drug Administration last year for *Diovan* for treatment of heart failure in patients not on an ACE inhibitor. If approved, *Diovan* would be the only ARB indicated in the USA for treatment of heart failure, the fastest- growing cardiovascular disease in the world.

"Our approach to expanding the ARB market demonstrated a leadership role nobody else had done that," says Paulo Costa, president and chief executive of Novartis Pharmaceuticals Corporation.

Still, our key growth drivers in the USA which include *Lotrel*, *Exelon* and *Lamisil* in addition to *Diovan* wouldn't have been able to gain market position in their respective segments without a dedicated and professional sales organization. The US field force has expanded briskly in the past few years, to 5 500 representatives by the end of last year from 2 815 representatives three years earlier. Quality also has risen rapidly judging from improved rankings for our sales force in independent customer satisfaction surveys.

New sales representatives spend about seven weeks of their first 14 months with the company in training. More than half of that training period is devoted to scientific and medical subjects, including stints at world-renowned medical centers such as Cleveland Clinic and Duke University Medical School.

The commitment to training is not limited to *Diovan*. Programs are tailored to the specific needs of field forces in respective disease areas. For example, new representatives joining our Oncology business unit complete a one-week "preceptorship" at M.D. Anderson Cancer Center in Houston, Texas. At this famous clinic, courses are custom-designed for Novartis staff and representatives gain additional insights into cancer therapy by accompanying physicians as they treat patients during daily rounds.

Meanwhile, refresher courses keep experienced sales staff abreast of the latest medical advances. Last year, sales directors responsible for our anti-asthma treatment *Foradil* attended a two-day course on pulmonary disease organized by Mt. Sinai School of Medicine in New York. This year, all members of the US sales force will be re-certified under a program of tests about the top two products each representative details.

For all our progess so far, says Greg Schofield, senior vice president for USA sales, "the goal remains to make Novartis best in class. Nobody is outworking us today and if we can channel all that energy and point our field force in the right direction, they'll do things they didn't know they were capable of."

Exactly how far that potential could reach is exemplified by the New Jersey South *Diovan* team where District Manager Doug Rutz has built a winning combination of youth and experience. A 34-year old New Jersey native who has spent his entire career with Novartis, Doug was initially hired as a

computer engineer but returned to night school and earned an MBA to finally realize his dream of moving into sales.

"As long as I've been here, people have been excited about the chance of coming out into the field," he says. "It's the best part of the company."

There's certainly plenty of independence. Most representatives work out of offices in their homes while Novartis supplies essential tools ranging from a car and laptop computer to printer and office supplies. District managers spend several days a week riding with their teams to help polish sales skills. Careful coaching and supervision also enables representatives to convey valuable information and provide outstanding service to customers.

The compensation system for representatives is based partly on the market share of Novartis products he or she promotes in the district with equal weighting given to increases in market shares. "Financially, we got a boost with the inception of an incentive share option plan that motivates and rewards high performers to be at the top of their game," Doug says. "That's important but the key to retention is liking the people you work with and the team. We're competitive."

The New Jersey South district stretches from rolling farmlands and working-class neighborhoods of Trenton, to affluent suburbs of Princeton, dotted with prestigious hospitals and medical centers. Barbara Munch expects to put nearly 40000 miles on her Dodge Caravan this year, covering a far-flung network of physicians.

A 23-year company veteran and winner of a coveted Cornerstone Club award for perennial top performance, she has maintained her own high sales standards while assisting Doug with coaching new arrivals. A lot has changed since 1978, Barbara says with a shy smile. Today women comprise about half of the US field force of Novartis but Barbara was the only woman in her district when she joined.

"Back then, physicians would sit down with you for 10 to 15 minutes, as long as you were willing to wait," she recalls. Today competition is tougher but knowledge about products and disease along with a commitment to serving physicians and patients remains the secret of success.

"We need the science to come up with new products, further research for existing products and also the field force to get all this information to physicians and help patients," Barbara says. "That's the bottom line."

Merina Wijaya's first exposure to Novartis came as a competitor. She was impressed enough to leave her former employer a major US drug company when a job offer came from Novartis last summer.

"There was a passion you could see that comes with working for Novartis," she says. "The pipeline is definitely what drew me here. We're not just jumping on the bandwagon we're being innovators and offering different ways of going against a disease."

The daughter of a psychiatrist and a nurse, Merina had medicine in her blood. After studying at Vassar, she earned a Masters degree in social work at the University of Pennsylvania, learning her way around the American healthcare system with internships ranging from adoption and child protection agencies to mental hospitals.

"Being a pharmaceutical representative is a melding of humanity and hard core science," she says. "It was the perfect job for me."

That feeling was reinforced during a training program at Duke Medical School packed with anatomy, physiology and pharmacology courses as well as seminars with cardiologists and endocrinologists. Case reviews where representatives were asked to propose therapy after being briefed on a patients' condition and previous medication "taught me to always keep the patient central," Merina says.

"This is a business and as sales people we're expected to do well," Merina says. "But what drives me to get up every morning is the thought of keeping the patient central and realizing that there's a plethora of information out there waiting to be tapped."

GENERICS

	2001 CHF millions	2000 CHF millions	Change in CHF %	Change in local currencies %
Sales	2 433	**1 973**	**23**	**26**
Operating income	281	**242**	**16**	
Research and development	169	**170**	**-1**	
Research and development as % of sales	7	**9**		

	2001 CHF millions	2000 CHF millions	Change in CHF %	Change in local currencies %
Free cash flow	46	**152**	**-70**	
Net operating assets	2 622	**1 939**	**35**	
Investments in tangible fixed assets	209	**241**	**-13**	
Number of employees	7 230	**5 712**	**27**	

Novartis Generics provides off-patent pharmaceutical products and substances and operates worldwide in two principal product segments: finished dosage forms ("Generics pharmaceuticals business") and active pharmaceutical ingredients and their intermediates ("Industrial business"). In the Generics pharmaceuticals business, finished dosage forms are sold to pharmacies, hospitals and other healthcare outlets, while in the Industrial business, active ingredients and their intermediates for pharmaceutical and biotechnological substances are sold to industrial customers.

Performance in 2001

Generics sales were up 26% in local currencies and 23% in Swiss francs, lifted by new product launches and more significantly by recent strategic acquisitions in the USA, Argentina, the UK, France, Italy and Germany. Particularly the USA benefited from recent restructuring efforts and the launch of the generic form of Prozac® (fluoxetine), for which Geneva Pharmaceuticals (our retail generics business in the US market) benefitted from a 6-month exclusivity to sell the 10mg capsule formulation. The Industrial business reported continued sales growth driven by increases in both penicillins and macrolide antibiotics, and a solid performance in cephalosporins.

Novartis Generics is a global business and intends to continue to expand its efforts globally in all major generics markets particularly the USA.

Product review

Approximately two thirds of the sales of Novartis Generics are derived from the Generics pharmaceuticals business and approximately one third of sales are derived from the Industrial business. Key product areas are antibiotics such as pencillins, cephalosporins, macrolides and medicines for the treatment of tuberculosis, central nervous system drugs, cardiovascular system drugs, alimentary tract preparations and hormonal tract preparations.

Generics pharmaceuticals business

Our Generics pharmaceuticals business benefited from many product launches and continued favorable sales development of the new generic version of the combination of amoxicillin and clavulanic acid. In the most important finished dosage forms market, the USA, double digit sales growth was achieved. The good performance is attributable to the integration of the former unbranded generics business of Apothecon (acquired in 2000), strong volume growth and successful launches of important finished dosage forms of pharmaceuticals such as the antidepressant medication, fluoxetine. In Europe, Germany remained the most important generics market. Due to changes in legislation the

pharmaceutical markets in France and Italy were opened for generic medicines. Through the acquisition (from BASF) of Laboratoires GNR-Pharma, France, and GNR Spa, Italy, Novartis Generics managed to capitalize successfully on the legislative changes favoring generic products in these new markets.

Industrial business

Our Industrial business (active pharmaceutical ingredients and biotech substances) experienced stable prices on a moderate level for bulk antibiotics. Sales growth was achieved by increased volumes and a shift to higher value products. In 2001, Biochemie started the manufacture of enzymatically produced 7-ACA at its affiliated plant in Frankfurt, Germany as a complement to the manufacture of this product at its Austrian plant using chemical methods. Biochemie is the world leader in the production of this key intermediate for cefalos-porin antibiotics. At its affiliated plant in Les Franqueses, Spain, Biochemie started the manufacture of the active ingredients for semisynthetic macrolides. This extension is a major step in our strategy to diversify our anti-infectives portfolio and to become a leading player in this market segment.

Research and Development

There is intensive development work required in order to demonstrate the bioequivalency of a generic drug to the original drug. Nevertheless, research and development costs associated with generic drugs are much lower than those of their original counterparts, and, therefore, patent-free drugs can be offered for sale at prices much lower than those of patented drugs, which must recoup substantial basic research and development costs via high prices over the life of the products' patent.

In Vienna, Austria, Novartis Generics opened a new research center staffed with 50 scientists where new active substances are to be developed for use as antibiotics.

Recently launched products:

Geneva Pharmaceuticals, USA

	10mg capsule formulation of fluoxetine, an essential treatment for depression
Biochemie (a world leader in antibiotics and bulk pharmaceuticals)	An antibiotic combination of Amoxicillin/Clavulanic Acid under the brand names *Curam* and *Clavamox* for the treatment of bacterial infections
Azupharma, Germany	*Roxythromycin AZU, Felodipin AZU* for heart desease, *Loratadin* for allergies and the antibiotic, *Ciprofloxacin AZU.*

Outlook

Novartis Generics will continue to focus on the important generics markets and on integrating newly acquired businesses. Sales growth is expected to be in line with the market. For the Industrial business, it is expected that new production units will reach full capacity.

CONSUMER HEALTH

	2001 CHF Millions	2000 CHF Millions	Change in CHF %	Change in Local Currencies %
Sales	6 675	6 514	2	4
Operating income	920	869	6	
Research and development	181	186	-3	
Research and development as % of sales	3	3		
Free cash flow	640	506	26	
Net operating assets	2 528	2 284	11	
Investments in tangible fixed assets	129	122	6	
Number of employees	12 824	12 949	-1	

Novartis Consumer Health, through its three business units "Over-the-Counter" (OTC) self-medication, Health and Functional Nutrition and Medical Nutrition, develops, manufactures and markets a wide range of health and medical nutrition products and a portfolio of self-medication brands.

Performance review

Consumer Health sales increased by 2% in Swiss francs or 4% in local currencies, to CHF 6 675 million in 2001 from CHF 6 514 million in 2000. In the USA sales reached CHF 3 283 million (49% of total) reflecting a 4% increase in local currencies despite the economic slowdown.

In OTC, the key brands *Lamisil* Cream (antifungal), *Nicotinell/Habitrol* (smoking cessation) and *Voltaren Emulgel*(topical pain relief) drove sales with double digit growth rates.

Health and Functional Nutrition sales were up 3% in local currencies (+ 2% in Swiss francs). *Gerber* reached a new record market segment share in the USA baby/toddler food segment, while *Gerber Care* and *Gerber Wellness* products continued to make progress in a competitive marketplace.

Medical Nutrition sales (+ 11% in local currencies, + 9% in Swiss francs) achieved particularly strong performance in Europe, where the focus on disease-and age-specific products allowed market share gains under the *Impact* and *Novasource* trademarks.

Product review

Our OTC business provides products for the treatment and prevention of common medical conditions and ailments to enhance people's overall health and well being. The company is ranked as a global top 5 self-medication business with strong positions in Europe and North America. The main product categories are cough, cold and allergy treatments, gastrointestinal treatments, dermatological treatments, analgesics, vitamins, minerals and supplements, venous disorder treatments and smoking cessation treatment.

Life-cycle management has become an important tool to the Novartis Consumer Health sector following the transfer of two key brands from Novartis Pharmaceuticals: *Voltaren Emulgel* and *Lamisil Cream.* In the USA, *LamisilAT Cream* rapidly built a strong OTC market share following its switch from prescription only to OTC status by providing consumers with a new standard in efficacy for the common problem of athlete's foot. *Voltaren Emulgel,* a topical analgesic for muscular pain, has also enjoyed significant growth when it switched to OTC from prescription only status.

In 2001, Novartis Consumer Health introduced new improved formulations for *Maalox* liquid antacid in the USA and *Quick Dissolves* chewable tablets for the *Sandoz* mineral line in Europe.

The Health and Functional Nutrition business encompasses foods designed to serve the particular nutritional needs of target groups including adults, the elderly, infants and athletes. Products include baby foods, consumer products such as sports drinks, slimming aids and functional health foods. Growth in 2001 was driven by refocusing advertising and promotion investments and through innovative programs in the core business with *Ovaltine/Ovomaltine, Isostar, Céreal/ Gerblé* and *Gerlinea.*

In Health Food, the focus will continue to be on the high growth categories of Sports Nutrition and Slimming, driven by *Isostar* and through an improved range of slimming products offering more complete meal replacement.

Gerber continued to build on its position as a leader in infant feeding and care, with a number of innovations in 2001. Within the *Gerber Care/Wellness* line, new hypoallergenic products such as foaming shampoo, baby mousse, moisturizers (face and body) were launched.

Our Medical Nutrition business focuses on the nutritional needs of people with serious conditions as well as hospitalised or convalescing patients. Our product portfolio ranges from enteral tube feeds and devices to oral supplements. 45% of 2001 incremental revenues have been generated by products launched in 2001, principally with gastro-intestinal and diabetes indications, under the brands *Resource, Isosource* and *Novasource.*

Research and Development

Currently, Novartis Consumer Health has a large number of research and development projects in progress. While the majority of these are in the OTC business unit, there is also significant activity

within the Medical Nutrition and Health and Functional Nutrition business units. Our nutrition and OTC research and development activities mutually benefit from joint efforts and share clinical trial, regulatory, preclini-cal and pharmaceutical development expertise. Novartis Consumer Health is also working closely with Novartis Pharmaceuticals to evaluate appropriate products that can be switched from prescription to OTC status.

Outlook

Despite the slow-down in global consumer-markets, the successful switches of *Lamisil* (athlete's foot) and *Voltaren Emulgel* (pain) from Novartis Pharmaceuticals should drive above-industry sales growth. Furthermore it is our intention to strengthen our number1 position in the European OTC market. *Gerber,* our successful Infant & Baby food brand, is expected to further expand into new market segments with *Gerber Wellness* and *Gerber Baby care.* In the successful Medical Nutrition business, we anticipate continued above-market growth through disease-specific, high-value products.

CIBA VISION

	2001 CHF Millions	2000 CHF Millions	Change in CHF %	Change in Local Currencies %
Sales	1 787	1 392	28	33
Operating income	174	100	74	
Research and development	98	67	46	
Research and development as % of sales	5	5		
Free cash flow	59	105	-44	
Net operating assets	2 310	2 345	-1	
Investments in tangible fixed assets	153	120	28	
Number of employees	6 797	7 644	-11	

With products sold in more than 70 countries, CIBA Vision is a world leader in the research, development and manufacturing of eye care products, namely soft contact lenses, lens care products, and ophthalmic surgical products.

Performance review

Sales increased by 28% in Swiss francs, or 33% in local currencies, to CHF 1 787 million in 2001, from CHF 1 392 million in 2000. Excluding the impact of the Wesley Jessen acquisition, sales increased by 5% in local currencies.

Product review

Strong sales growth was generated by the lens business, particularly with the new generation *Focus* contact lenses, which includes *Focus DAILIES,* the daily disposable lenses. FDA approval was received for *Focus NIGHT & DAY,* the first high-oxygen extended wear contact lens that can be worn for up to 30 days and nights of continuous wear. The product was launched in the USA in November 2001. Also in 2001, CIBA

Vision launched *Focus DAILIES Progressives* in the USA and Canada. It is the first daily disposable contact lens in the world to correct presbyopia.

The acquisition of Wesley Jessen in October 2000 has brought CIBA Vision a range of products that complement our existing brands as well as technology expertise, particularly in the area of specialty lenses.

The *Focus* family of contact lenses

Lens	Function
Focus Toric	Corrects astigmatism
Focus Monthly	Replaced monthly
Focus 1-2 Week	Replaced every one to two weeks
Focus 1-2 Week SoftColors	Replaced every one to two weeks; enhances the color of light eyes
Focus DAILIES	One-day disposable
Focus Progressives	Corrects presbyopia
Focus NIGHT&DAY	Extended wear for up to 30 days and nights continuous wear
Focus DAILIES Progressives	One day disposable to correct presbyopia

Sales of lens care products continued to suffer in an overall declining market. *AOSept Clear Care,* an enhanced formulation of our leading hydrogen peroxide disinfectant, was launched in the USA in June 2001. It is the first one-bottle, no rub lens care solution with no added preservatives in the USA. *SOLO-care Plus,* an enhanced formulation of our one-bottle lens disinfection system, received the CE mark in April 2001. The product offers a one-bottle, no rub, no rinse cleaning and disinfection system.

CIBA Vision introduced in 2001 a new version of our *MemoryLens,* the only pre-rolled intraocular lens in the world. The new tight roll of the CV232 uses the same pre-folded *MemoryLens* technology, but allows surgeons to insert the lens through an even smaller incision than before. It is used to restore vision in patients with cataracts.

Having received the CE Mark for the Phakic Refractive Lense (PRL), clinical trials are going on for registration in the USA. PRL is the first and only foldable posterior chamber phakic refractive lens designed to float on a patient's natural lens and to self-center behind the iris. *Vivarte,* the first and only foldable anterior chamber phakic refractive lens, will be launched in Europe in 2002.

Research and Development

CIBA Vision intends to expand its product portfolio through both its own dedicated research and development resources as well as the acquisition of new and innovative technologies. Product development is focussed on contact lenses as well as ophthalmic surgical products and involves the creation and development of entirely new product offerings in these markets, as well as line extensions of current products. The acquisition of Wesley Jessen VisionCare, Inc. in 2000 included several exciting technologies and CIBA Vision anticipates incorporating these technologies into other contact lens products in its pipeline.

Outlook

Sales growth is expected to continue to be driven by the highly successful *Focus* range of contact lenses including *Focus DAILIES* and *Focus NIGHT & DAY*. Increased competition and price pressure is anticipated for high volume and frequent replacement lenses. As a result of the shift in consumer preferences from conventional lenses to disposable lenses, lens care products are expected to continue to decline. CIBA Vision expects to maintain its market position in this segment through recently launched enhancements to its popular products including *AOSept Plus/AOSept Clear Care* and *SOLO-Care Plus*. Despite a significant increase in R&D investments, operating income is expected to increase.

ANIMAL HEALTH

	2001 CHF Millions	2000 CHF Millions	Change in CHF %	Change in Local Currencies %
Sales	962	1 083	-11	-7
Operating income	138	179	-23	
Research and development	93	88	6	
Research and development as % of sales	10	8		
Free cash flow	195	173	13	
Net operating assets	572	644	-11	

	2001 CHF Millions	2000 CHF Millions	Change in CHF %	Change in Local Currencies %
Investments in tangible fixed assets	19	20	-1	
Number of employees	1 997	1 975	1	

Novartis Animal Health enhances and extends the life of companion animals and improves the health and productivity of farm animals.

Performance review

Sales declined by 11% in Swiss francs, or 7% in local currencies, to CHF 962 million in 2001 from CHF 1 083 million 2000 due to the economic slowdown and substantial inventory reductions at US companion animal veterinary clinics. The foot-and-mouth disease crisis in Europe had a negative effect on the farm animal business. Sales were lifted by the strongly growing vaccine and aquaculture businesses as well as by *Tiamutin* for respiratory and gastroenteric diseases in pigs. *Fortekor,* the heart failure treatment for dogs, again showed double digit growth boosted by the additional indication for chronic renal insufficiency in cats.

Product review

Pets are an important part of everyday life for millions of families around the world. The products of Animal Health help to protect them from parasites such as fleas and worms, assisting them to enjoy longer and disease-free lives. *Interceptor* prevents heartworm disease, controls hookworm, and removes and controls roundworm and whipworm in dogs, all in a single monthly tablet. *Sentinel* combines the benefits of *Interceptor* with prevention of flea infestation. *Capstar* is a recently launched fast acting flea contol product and the perfect partner for *Program,* a once-a-month oral medication which breaks the life cycle of the flea at the early egg stage. *Fortekor* treats heart failure in indogs and has also been proven as an effective and safe treatment for chronic renal insufficiency in cats.

Farm animal products

Sickness and disease can be devastating to a livestock population and, in turn, to farm productivity. Novartis Animal Health develops products to control the parasites that attack farm animals, the diseases that infect them, and the insect pests that invade their environment. Key products include *Tiamutin* and *Econor* to treat bacterial infections in pigs and poultry and a range of parasiticide products such as *Vetrazin* against blowfly in sheep, *Acatak* to control ticks on cattle as well as *Fasinex* and *Endex* against liver fluke and gastrointestinal worms in cattle and sheep. The product portfolio is completed by products like *Esb3* and *Cosumix* against poultry diseases, *Neporex* and *Larvadex* as part of the fly control range against disease transmitters as well as a range of vaccines for farm animals and farmed fish.

Recently launched products:

Companion animal products

Capstar	Fast-acting oral flea control for dogs and cats
Program Plus	Flea and intestinal worm prevention for dogs and cats
Fortekor	Claim extension for chronic renal insufficiency in cats

Farm animal products

Fasimec	Parasite control for cattle
Clik	All-season protection against blowflies in sheep
Endex	Parasite control for farm animals

Research and Development

Animal Health research and development activities focus on parasiticide control for companion and farm animals. We also develop veterinary pharmaceuticals for pets in new indication areas as well as vaccines for farm animals and farmed fish. Based on high-capacity, ex-vivo microscreens, high-throughput screening focuses on assessing a high number of natural products and synthetic chemicals. Our researchers collaborate with external partners to develop veterinary treatments. Drug delivery projects, also in collaboration with external partners, concentrate on the identification and development of suitable sustained release and palatable formulations for use in parasite control.

Outlook

The animal health market is expected to show limited growth and continued competitive pressures particularly in the flea and heartworm market for companion animals. However, new product launches and label expansions for new indications alongside the contribution by the recently acquired vaccine businesses are expected to improve sales.

CORPORATE CITIZENSHIP AT NOVARTIS

A Cure for Malaria

Malaria is one of the world's biggest killers. Every year, it claims more than a million lives mostly children. Millions more are incapacitated. The damage to productivity in many affected regions is tremendous. Malaria is treatable, but unfortunately for those affected it is a "poor

person's" disease that does not attract anywhere near the same commercial attention as cancer or AIDS. Malaria sufferers live in remote areas where poor infrastructure and inadequate healthcare undermine treatment efforts. Even where malaria drugs are available, they may not be effective due to local resistance patterns or multiple reinfections, or they may not reach those afflicted at prices they can afford.

Novartis manufactures one of the world's most effective malaria treatments. *Coartem* is an innovative combination of a traditional Chinese plant-based remedy and a synthetic substance called lumefantrine. In tests, *Coartem* has shown a remarkable efficacy of over 95 percent so far, without yet inducing clinical resistance. In 2001, Novartis entered into a partnership with the World Health Organization (WHO) to stem the spread of malaria in Africa and other parts of the world where the disease is endemic. To ensure maximum reach of the program, Novartis agreed to supply *Coartem* at cost; the WHO undertook to distribute *Coartem* through its extensive support networks in severely malaria-struck regions.

This is no ordinary drug venture. For example, the program requires specific packaging and easy-to-understand pictorial instructions for illiterate patients. The packs are also designed to encourage compliance. The distinctiveness of the design, along with the WHO's direct involvement, makes it difficult for profiteering intermediaries to divert the treatment packs from their rightful destination to black markets elsewhere.

"We are so thankful," says Thomas Maluleke, who lives with his family near the gate of the Kruger National Park in South Africa. Within a period of a several days in December 2001, first his 10-year-old daughter and then 6-year-old twin daughters became infected with malaria. Next came his wife, and then Thomas himself.

Unlike too many of their neighbors and relatives, they survived. Fortunately, Kruger National Park doctors are particularily aware of the disease and so were able to diagnose malaria quickly and commence with *Coartem* treatment. All five family members responded favourably and experienced no side effects.

"Miraculously, four days later, my wife and I were both back at work and our children were playing again, thanks to *Coartem*."

Pictoral instructions of *Coartem* packaging to ensure proper usage.

Moreover, the WHO's involvement eliminates red tape which might otherwise add greatly to the complexity and cost of drug distribution. Our experience in fighting malaria is providing valuable knowledge for future projects and broadens our understanding of the epidemiological and social context of the disease.

Over the years, the impact of the malaria program could well be enormous. In fact, our *Coartem* may help to save more lives than most other medicines do. Yet malaria is just one of the forgotten illnesses we are targeting. We are also determined to help patients with other neglected diseases, because we believe that by doing so we can help alleviate some of the most deplorable humanitarian problems in developing countries.

Mature and Responsible Citizenship

The desire to be a responsible and positive force in the global community lies at the heart of our concept of corporate citizenship. Our definition is simple. As a corporation, we want to act the same way that a mature, responsible and conscientious citizen would act in the community.

Our understanding of the company's role in society has evolved over the past few years. Traditionally, we have paid close attention to matters of health, safety and the environment. A dedicated corporate function, strengthened by experts in each business sector and at each production site, supports line management in achieving a leadership position in this field.

In recent years, we expanded the focus to include sustainability, which is based on the notion of a triple bottom line; we want to operate in a manner that is sustainable in terms of environmental impact, economic viability and its effect on society.

Addressing the societal dimension, we decided to subject our business ethics to a rigorous standard. Two years ago, we established our Code of Conduct, which stipulates the principles under which we conduct our business worldwide. Incentives and a communications and training program were created to foster a supportive corporate culture, and compliance officers were appointed in each business and at the

corporate level to guide the company's behavior around the world.

In 2000, we commited to the Global Compact, an initiative sponsored by United Nations Secretary General Kofi Annan, which specifies nine principles regarding human rights, respect for employees and environmental protection.

In 2001, these and other efforts culminated in our Policy on Corporate Citizenship. By specifying our ideas in a formal policy, we completed the framework that guides our actions.

The Agenda

In practice, corporate citizenship is an ambitious task that encompasses our entire organization. Addressing our role in society, we identify five broad areas of commitment.

First and foremost, we are determined to provide products whose quality is beyond reproach. The research and development of pharmaceuticals, for instance, is governed by a comprehensive system of independent verification, peer reviews, controlled clinical trials and regulatory supervision. Clinical trials themselves are also strongly regulated. Physicians, patients and regulatory authorities are informed about foreseeable or encountered adverse reactions to our drugs, and marketing practices are designed to promote and encourage the appropriate use of our products.

Safe operation of facilities is another top priority. Production processes meet or exceed government-mandated standards and are continuously improved. We are equally concerned about the physical safety and health of employees and the neighborhoods where we operate. Emissions and the disposal of waste products are carefully monitored and minimized. While many of these activities and processes are tightly regulated in most countries, we recognize that additional work may be needed. Third party suppliers and contractors are encouraged to comply with our standards.

Our third commitment is to our employees whom we consider essential to our success. Human resource policies and practices are based on fairness, openness and mutual respect. We seek to observe the human rights of employees, to pay fair living wages, to encourage a healthy work-life balance, and to support the principle of freedom of association.

Our fourth commitment articulates our respect for the communities that sustain us. Our Code of Conduct states that Novartis will not allow its people to engage in corruption, insider trading,

obstruction of fair competition and similar forms of unethical behavior anywhere it operates. We actively seek an open dialogue with stakeholders who represent legitimate community interests, and we prefer to work with those who contribute actively to the solution of problems.

Our fifth commitment indeed our fundamental purpose is to improve lives by providing innovative medicines, now and in the future. We invest in large-scale research and development of treatments while observing the precautionary principle. At the same time, we seek to address the problems of access and affordability in constructive ways.

Access and Affordability

We are deeply concerned about the pernicious effects of hunger, poverty, inadequate infrastructure and poor political governance in many parts of the world today.

In our Policy on Corporate Citizenship, we have made the commitment to support efforts to improve access to medicines. In addition to malaria, we are fighting leprosy in close cooperation with the WHO by donating all necessary drugs worldwide free of charge. A new Novartis research institute for tropical diseases in Singapore will conduct research into treatments for tuberculosis and dengue fever. Through these and other programs, Novartis has committed several hundred million Swiss francs over the coming years to combat diseases that affect the populations of the poorest countries in our global community.

Affordability and access to treatment are important issues in the industrialized world as well. Novartis recognizes that not all people can afford the type of medical care that others may take for granted. In a number of situations, Novartis takes active steps to alleviate the burden of those who could least afford to pay for treatment. For instance, patient assistance programs have been introduced for *Glivec/Gleevec,* our highly innovative leukemia drug.

As life expectancy grows and the number of elderly citizens increases, demand for innovative and affordable healthcare is growing rapidly. In the United States, we recently announced the introduction of the Novartis *Care Card*, a discount program for elderly patients with low incomes and inadequate insurance coverage.

Corporate Citizenship as an Integral Aspect of Business

Corporate citizenship is an integral aspect of Novartis business strategy. In the global health community, each party is called upon to contribute its unique knowledge, experience and values. We are part of this community, and we recognize the need to engage in a dialogue about the values that guide us.

Historically, there have been two approaches to providing healthcare: the charitable approach that acknowledges a moral duty to help those in need, and the commercial approach that views medicine as a precious good. Today the pharmaceutical industry stands at the intersection of these two traditions. Its power to innovate is a function of free enterprise, but the value it creates is frequently delivered through the structures of the public sector. In practical terms, this means that Novartis must operate simultaneously and successfully in two worlds: in the global market economy and in the political context of national healthcare systems.

The modern pharmaceutical industry is an innovation engine of great sophistication. In practice, the development of medicines is defined by lengthy investment cycles and a high degree of complexity. By investing primarily in knowledge, we create valuable products. For a knowledge business, the recognition of intellectual property rights is critical. A sound, reliable legal framework with good protection of intellectual property rights helps to protect the industry's investment in research and development. In recent years, however, the politics surrounding intellectual property rights have introduced a new level of entrepreneurial risk.

Corporate citizenship is a strategy to manage risk and explore new opportunities. It reduces the uncertainty that our shareholders face by defining our company's relationship with patients, employees, communities, and society at large. We cannot seek to eliminate all risk or to maximize returns beyond measure; we aim for a balance. Adequate returns on investment, which compensate our investors, are the foundation for future innovation. Investors must be rewarded for the risks they take. To think otherwise would be perilous for a business enterprise.

But it's not just a matter of economics. The customers and the workforce of Novartis care deeply about how the company conducts its affairs around the world. People come to work at Novartis not only because they want to make a living, but also because they want to make a difference by contributing to the well-being of other people.

The advances in medical science in the last decade have been astounding, and our industry has helped to improve the quality of life for broad segments of the world's population. Our employees and customers and all our partners in the fight for better health expect us to continue to deliver on the promise of innovation while living by a set of principles that define our role as a citizen of the world community.

Next steps

Of course, good intentions and a clear strategy are only a first step. Novartis is integrating the principles of good corporate citizenship into its daily operations, which is ultimately a matter of reshaping the corporate culture.

We have begun to build awareness and secure the commitment of all Novartis employees. Practical standards are being developed for each policy principle, and these standards will form the basis for management processes and incentive systems. We will use independent verification, and there will be mechanisms to monitor progress and reconcile conflicting priorities. Third party suppliers and contractors will be encouraged to comply as well. Responsibility for all of this lies with business line managers, guided by a steering committee and a dedicated project organization at the corporate level. At the same time, the concept of corporate governance has been expanded to ensure accountability for corporate citizenship through clear structures and responsibilities.

In its wider sense, corporate governance reaches beyond the board and shareholders to address the relationship between the company and society at large including government, regulators, communities and non-government organizations. Key elements of this relationship will be

transparency and accountability. We will report on our progress on an annual basis. The next update* is scheduled for April 2002.

Corporate citizenship at Novartis is a work in progress. A number of important objectives have been accomplished, yet there is still a long way to go.

Standards and practices vary from country to country. There may be limits to what can be measured and managed. Still, we are committed to a policy of prudent and controllable, but also consequent, implementation. Our task is ambitious, but we have a solid foundation to build on.

*Corporate Citizenship at Novartis

WHAT IT ALL MEANS TO ME

How Novartis employees perceive the company's commitment to its societal responsibilities

Janitha Muthuthamby
Laboratory Technician, Oncology
"It makes me very happy to hear what we are doing for leprosy patients. People in Europe don't know much about that terrible problem."

John Manser
Group Treasurer
"Companies which do not behave in an ethical and humanitarian way are certainly not a good long term investment."

Zariana Nikolova
Clinical Researcher
"First as a medic I am glad of the involvement of Novartis in such humanitarian programs and secondly as a person coming from a poor country I am proud that Novartis is doing so much for the developing countries."

Albert Kim
Business Planning & Analysis
"We have to look around. We cannot focus purely on ourselves and on delivering shareholder value.

Reputation is also an asset."

Claudia Betschart
Laboratory Scientist
"I could see myself actively supporting our projects in developing countries, where we help local institutes and talented local people to work on their local diseases."

Chris Kaplan
Head Therapeutic Franchise Cardiovascular
"Our customers recognize our humanitarian efforts and they actually feel good about prescribing our products."

Corporate Citizenship Projects Regarding Access to Healthcare

Malaria	Innovative cooperation with the WHO; delivery at cost; integrated success-monitoring
TB, dengue fever	Center for research into neglected tropical diseases in cooperation with Government of Singapore
Leprosy	Donation of medicines in cooperation with the WHO; fieldwork, health and rural development projects
Cancer	*Glivec/Gleevec* Patient Assistance Program *Femara* Patient Assistance Program

Affordability	Drug discount program (Novartis *Care Card*) for low-income elderly patients in the USA without adequate insurance coverage
Employee access	Prevention, diagnosis, treatment for employee families (including AIDS, TB and malaria) in developing countries
Community Involvement	Community Partnership Day with worldwide participation of employees (14 000 employees in 43 countries)

HEALTH, SAFETY AND ENVIRONMENT

Health, Safety and Environment (HSE)

Health, Safety and Environment have been and are the cornerstones of our Corporate Citizenship approach. The new Policy on Corporate Citizenship has emerged from the HSE Policy. With this, the Novartis approach to HSE continues to be based on the following pillars:

HSE Organization: Management of HSE is a line responsibility. A member of the Executive Committee is ultimately responsible for all aspects of HSE and chairs the HSE Corporate Steering Committee, which sets policies and standards Group-wide. The Corporate HSE organization oversees and reviews implementation and performance across the Group. Sectors are responsible for implementation. At site level, where our activities have the most direct impact, HSE Officers give professional support.

HSE Management Cycle: The HSE management cycle starts every year with an assessment of the HSE situation in each Sector. This is done based on the HSE performance data of the previous year. Risk portfolios are established every year at site level and are consolidated into Sector and then a Group Risk Portfolio. In addition, the results of all audits performed in the previous year are used as input. The process culminates in a formal "HSE Sector Review" between the Executive Committee member responsible for HSE and each Sector Head. Based on this review, targets for the following year are agreed upon as the basis for action plans and projects. Actual achievements against these targets are reviewed at the next year's HSE Sector Review. From 2002 onwards it is planned to expand the HSE Sector Review into a Corporate Citizenship Review, including HSE.

Similarly the HSE situation is also assessed at corporate level, and corporate HSE goals are set for Novartis.

Update on Corporate Goals for 2001

A strategic risk review has been undertaken with the result that our efforts are intensified in the areas of business interruption, HSE performance of third parties and regular, systematic assessments of benefits and risks of our products beyond the stingent regulatory requirements.

In addition, we have analyzed emissions in comparison to legal requirements, relative impact, state-of-the-art technology and those of competitors. We concluded that in many areas we are already at an excellent level. However, we also noted that we need to reduce emissions of halogenated solvents. Water consumption and generation of hazardous and non-hazardous waste must be reviewed to ascertain the reasons for not comparing favorably with the industry average and then develop action plans where appropriate.

We exceeded the first corporate target for CO_2 of a 1% absolute reduction of emission. This was down 7% as compared to the year 2000. We also reduced accident frequency by 22% and thus made progress towards the corporate three-year goal of 0.5 - 0.7 accidents per 200 000 hours worked in 2003. The third long-term objective is "reputation" as measured by a composite of leading external and sustainability indexes. The inclusion of Novartis at fourth place in the Dow Jones Sustainability Index represents considerable success towards the goal of becoming a leading company in our sector on HSE and sustainability.

For our HSE balanced score card, we have instituted key performance indicators on the "audit implementation score", the "line management satisfaction score" (with HSE), and the "HSE employee satisfaction score", and we have established a first baseline. We continue to work to update our financial key performance indicators.

In support of the Global Compact commitment we have developed our Corporate Guideline on Transportation, which includes requirements regarding third parties used for transport by Novartis. This Guideline will be supplemented with additional Guidance Notes in 2002.

Corporate Citizenship has been given a prominent place on the Novartis Internet and Intranet websites.

Corporate Goals for 2002

Begin implementation of risk reduction measures based on the strategic risk review 2001

Establish standards for suppliers with regard to Corporate Citizenship, particularly health, safety and environment

Further develop Balanced Score Card Key Performance Indicators, particularly for evaluation of training targets and financial performance

Establish a more systematic training approach

Review Group waste disposal practices and propose measures to eliminate the risk of environmental damage from waste disposal

Continue to achieve long-term corporate targets (accident reduction, CO_2 reduction and reputation)

Biosafety Program

The Novartis biosafety program provides standards, tools and practices to manage potential risks to human and animal health and the environment that may be incurred in our biotechnology activities. Our Corporate Guideline on Biosafety sets up risk management and safety measures based on internationally established and acknowledged standards. All units that handle biological materials must meet or exceed these standards. Before undertaking any biotechnology project, a thorough risk analysis is initiated: all agents used are classified according to international categories, and labs are equipped with the appropriate safety features and practices. Special biosafety audits are conducted regularly on sites with biological activities.

Remediation

Because past operations may have led to the contamination of soil and/or groundwater, Novartis has established financial reserves of CHF 228 million to take responsibility for its estimated environmental liabilities. In the area of Basel, the local chemical industry (including predecessor companies of Novartis) has established an organization to proactively find timely solutions for the possible consequences of past disposal practices at a number of landfills. The aim is to eliminate acute and long-term risk through measures that are eco-efficient, pragmatic and utilize current state-of-the-art technology, based on professional assessment in cooperation with the authorities.

HSE Performance Data System Boundaries

The system boundaries are defined as the physical boundaries of the Group's sites. Impacts originating inside the fences of these sites are reported together with major material flows across these boundaries. Current system boundaries do not measure impacts from the manufacture of purchased goods, energy and transportation. In order to understand the scope of these unmeasured impacts, we estimated additional CO_2, NO_x and SO_2 emissions stemming from external electricity production. Taking these estimates into account increases our CO_2 emissions by 150%, our NO_x emissions by 350% and our SO_2 emissions by 900%. Rough energy-use estimates for other activities beyond our system

boundaries were as follows: transportation of goods: + 6%; office buildings with unreported energy use: + 3%; business travel by air: <+1%; sales force travel: +3%; commuting: approximately +2% (of all total reported energy consumption). We do not yet systematically measure the environmental impact of products throughout their life cycle.

2001 data was collected from 116 sites owned and managed by Novartis, representing all sites with major HSE impacts and which represent all production, formulation and R&D sites, and include 3 new site acquisitions reporting for the first time (2 of which contributed to significantly higher emissions). The most significant change in the system boundaries is due to the demerger of the site service operations of the Basel sites (the now independent operations serve Novartis and the other global companies operating on these sites). As a result, more energy generation is outside the system boundaries, as is waste incineration.

Update on Sector Goals for 2002

Sector	Targets 2001	Results 2001	New Targets
Pharmaceuticals	Lost-time accident rate 0.5[1]	Improved, but not yet not achieved: 0.68[1]	Lost-time accident rate 0.5[1]
	Prevent drug substance releases from manufacturing	Releases of relevant substances into wastewater effluent assessed, prevention actions initiated, 80% of drug substances evaluated	Ongoing
	Implement HSE management system consistent with international standards	Certification of Barbera (Spain), renewal of Wehr (Germany), and Ringaskiddy (Ireland)	Ongoing
Generics	Lost-time accident rate below 1.0[1]	achieved: 0.88[1]	Reduction of LTAR to <0,9[1] by 2002, 0,7[1] by 2004
	Improve worldwide risk portfolio and environmental data reporting	All HSE officers trained, awareness discussions with CEOs and production managers	
	Implementation of systems to define quantitative energy targets till end of 2002	Systematic energy measuringequipment in companies requiring 80% of energy	Energy reducing projects in Kundl by the end of 2002 equivalent to 1.6% of Group emission(2000)
	No increase in halogenated solvents emission, despite production increases	Achieved (excluding sites acquired during 2001)	50% reduction of halogenated solvent emissions in Europe (12% globally) by 2003 - based on European values 2000
Consumer Health	Lost-time accident rate 1.0[1]	Achieved: 0.81[1]	Lost-time accident rate 0.7[1]
	Establish HSE Management Systems for improved compliance	No fines resulting from adverse regulatory actions.	
	Reduce energy use by 2%	- 7%, partly due to lower production	Further energy reduction relative to production
	Implement 3rd party HSE management system	Developed 3rd party contractors risk portfolio	Improve risk portfolio of 3rd party contractors
CIBA Vision	Lost-time accident rate below 0.9[1]	Achieved: 0.59[1]	Lost-time accident rate below 0.75[1] and a reduction of 10% on every site
	Achieve 64% effluent water recycling at Atlanta production site	Achieved through recycling and optimization	Continue water conservation
	Global new employee HSE orientation program	Program approved, implemented and ongoing	Study potential CO_2/energy reductions for 2003
			Review risk analysis at all sites
Animal Health	Lost-time accident rate: <0.5[1]	Not yet achieved: 0.67[1]	Lost-time accident rate below 0.5[1]
	In-depth assessment of 3rd party manufacturers	All assessed according to Sector Guidance Note	Evaluate and improve 3rd party contractors risk portfolio
	Integration of newly acquired sites into Novartis HSE culture	Performance management, risk portfolios and emergency management integrated	

[1] accidents per 200 000 hours worked

	Pharmaceuticals		Generics		Consumer Health		CIBA Vision		Animal Health				2001 vs	Novartis* (continuing activities)		
	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2000(%)	1999	1998	1997

	Pharmaceuticals		Generics		Consumer Health		CIBA Vision		Animal Health				2001 vs	Novartis* (continuing activities)		
FINANCIAL PERFORMANCE																
Sales [CHF millions]	20 181	18 150	2 433	1 973	6 675	6 514	1 787	1 392	962	1 083	32 038	29 112	10%	25 409	24 224	23 746
EMPLOYEES																
Employees [year end]	41 256	38 397	7 230	5 712	12 824	12 949	6 797	7 644	1 997	1 975	71 116	67 653	5%	64 493	65 727	69 209
HSE Personnel	325	333	189	116	151	242	35	64	24	28	728	783	-7%	773	841	838
incl. security guards	119	141	19	53	63	92	27	45	3	3	231	334	-31%	308	348	364
FINANCE																
HSE investments [CHF millions]	30.9	19.7	11.5	16.2	5.96	14.6	4.25	3.73	1.70	0.91	55.6	55.1	1%	49.9	83.4	62.7
HSE expenses [CHF millions]	204	150	33.9	32.8	19.7	30.5	2.25	6.16	2.14	4.45	274	224	22%	160	135	213
PRODUCTION																
Total production [1000 t=metric tons]	29.4	26.6	86.8	80.7	535	566	18.0	14.5	3.97	3.90	674	692	-3%	673	626	543
RESOURCES																
Water consumption [million cubic meters]	19.4	19.8	59.7	57.4	9.57	9.94	0.64	0.64	0.41	0.27	89.8	88.0	2%	87.4	77.2	72.6
Energy consumption [million GJ]	5.88	5.97	4.77	4.49	3.41	3.38	0.61	0.48	0.12	0.11	14.8	14.4	3%	15.1	14.4	12.9
HEALTH/SAFETY																
Lost-time accident rate [accidents per 200 000 hours worked]	0.68	0.83	0.88	1.33	0.81	1.31	0.59	0.49	0.67	0.73	0.72	0.93	-22%	1.07	1.32	1.63
Lost work day rate [lost days per 200 000 hours worked]	12.3	13.5	11.6	13.4	13.1	23.6	8.80	5.51	6.26	6.43	11.8	14.4	-18%	15.7	17.0	21.7
WATER EMISSIONS[1]																
Effluent discharge [million cubic meters]	0.43	0.42	1.12	1.00	0.49	0.48	0.05	0.05	0.01	0.01	2.10	1.96	7%	2.08	2.14	2.02
Suspended solids [t]	263	206	223	252	127	145	3.40	2.25	10.3	3.96	627	609	3%	669	1 064	1 212
Chemical oxygen demand COD [t]	466	667	2 860	2 410	841	967	43.9	57.2	10.8	13.9	4 220	4 110	3%	4 410	4 710	5 010
Total nitrogen [t]	91.3	74.1	301	166	10.0	264	0.48	0.32			403	505	-20%	433	650	748
Phosphate [t]	31.9	13.6	22.5	59.5	6.14	18.9	0.80	4.57			61.4	97.0	-37%	172	128	117
Soluble salts [t]	8 380	9 510	11 700	10 600	65.5	519	68.9	95.2			20 200	20 800	-3%	22 500	24 800	24 700
Sum of heavy metals [t]	0.46	0.32	<0.01			<0.01	<0.01	<0.01			0.46	0.32	43%	0.25	1.27	0.87
AIR EMISSIONS																
Carbon dioxide [1000 t][2]	178	185	106	117	148	155	5.00	6.00	4.00	6.00	441	469	-6%	578	636	507
Sulfur dioxide [t][2]	75.9	85.9	165	50.3	115	180	0.42	0.21	31.5	10.8	388	328	18%	406	623	376
Nitrogen oxide [t][2]	184	188	85.5	94.9	116	119	7.13	4.66	5.78	8.34	399	415	-4%	493	572	485
Particulates [t][2]	10.1	12.0	3.02	15.9	19.5	37.3	0.47	0.29	4.68	0.38	37.9	65.9	-42%	40.5	54.9	36.5
Hydrochloric acid [t]	1.81	1.63	2.57	3.23	<0.01	<0.01	<0.01	<0.01	0.01	0.01	4.39	4.87	-10%	5.42	5.05	4.64
Ammonia [t]	<0.01	0.63	<0.01	<0.01	0.48	0.48	<0.01	<0.01	0.02	0.02	0.50	1.12	-56%	9.64	10.3	5.21
Volatile organic compunds (VOC) nonhalogenated [t]	25.2	34.2	614	387	0.02	0.02	23.3	0.00	19.0	15.0	682	436	56%	398	339	471
Volatile organic compunds (VOC) halogenated [t]	387	342	575	475	23.1	26.2	0.58	1.43	5.58	4.58	991	849	17%	844	1 066	1 090
Chlorofluorocarbons (CFC-11 equivalents) [t]	n.a.	0.91	n.a.	0.56	n.a.	0.05	n.a.	0.01	n.a.	0.04	n.a.	1.57	n.a.	2.49	1.06	0.60
WASTE[3] (1000 t)	23.2	24.1	11.5	7.94	158	160	4.92	4.22	0.76	0.74	198	197	1%	215	208	173

	Pharmaceuticals		Generics		Consumer Health		CIBA Vision		Animal Health				2001 vs	Novartis* (continuing activities)		
Nonhazardous waste generated																
Recycled	11.0	10.3	8.91	5.80	133	109	0.51	1.30	0.23	0.18	153	127	21%	134	141	122
Treated	6.67	7.98	0.48	0.54	3.16	2.65	0.51	0.58	0.03	0.07	10.8	11.8	-8%	11.2	12.5	10.1
Disposed of	5.55	6.17	2.13	1.63	15.3	44.8	3.03	2.34	0.46	0.45	26.5	55.3	-52%	67.1	53.0	44.2
Hazardous waste generated	37.8	39.1	15.5	11.1	0.28	0.37	0.13	0.09	0.49	0.52	54.1	51.2	6%	41.6	64.0	57.3
Recycled	8.53	9.42	6.11	3.60	0.02	0.03	<0.01	<0.01	0.05	0.10	14.7	13.2	12%	9.63	15.5	8.32
Treated	27.1	28.2	7.66	6.39	0.24	0.33	0.10	0.08	0.44	0.42	35.5	35.4	0%	28.0	41.9	34.5
Incinerated	25.6	26.6	6.35	4.23	0.21	0.24	0.10	0.08	0.43	0.40	32.6	31.5	4%	25.5	37.8	
Landfill	1.85	1.29	1.66	2.28	0.01						3.52	2.86	23%	3.52	4.97	7.15
Other disposal	0.05	0.09	<0.01		<0.01		<0.01				0.08	0.11	-27%	0.22	1.39	1.30
Intermediate storage	0.26	0.18	<0.01	0.04	<0.01	<0.01			0.01	<0.01	0.28	0.22	30%	0.14	0.10	6.45

1 WWTP excluding cooling water

2 calculated based on energy breakdown

3 Difference between generated and handled waste comes from storing waste in previous years and treating it in current year

* Including corporate functions
Sector split based on 2001 organizational structure and not comparable with 2000 reporting due to spin-off of Novartis Services 2000 data has been quoted reflecting the current organizational structure. Previous years are not restated.

HSE data analysis

Resource consumption: energy and water

Overall tons produced for the Novartis Group decreased by 3%, with a 5% decrease by Consumer Health off-setting increases in all other sectors.

Water use was up by 2%. This is mainly the result of an increase in Generics due to new production buildings and processes (+ 4%) despite significant reductions in a Consumer Health site (- 31%).

Energy consumption increased by 3%, due to higher production levels in Generics and new facilities acquired by CIBA Vision, partly offset by a decrease in energy consumption in Pharmaceuticals. The energy mix changed with an increase of electricity from 37% in 2000 to 39% of total energy used.

Air emissions

Novartis has set a target to achieve a 3% absolute reduction of CO_2 emissions in the period of 2000 - 2003. Principally, there are four methods to reduce energy use and the resulting CO_2 emissions: optimization, technical improvements, energy efficient new installations and improvements in the energy mix: electricity 39%, gaz 35%, steam 9%, fuel oil 8%, misc. 9%.

Overall, Novartis reduced CO_2 by 6%, mainly achieved through improvements of energy efficiency and increased use of electrical energy.

Halogenated solvent emissions (VOC halogenated) increased significantly by 56%, due to two new sites acquired (without these acquisitions halogenated solvent emissions would have decreased by 27%).

For the same reason, non-halogenated solvent emissions (VOC) and SO_2 emissions increased by 18% and by 16% respectively (without recent acquisitions there would be a reduction of 19% of SO_2 and no change for solvent emissions). Analysis and conservation activities at the two recently acquired sites are underway to improve the situation.

Methodology and data collection

doCOUNT HSE (for documentation and acCOUNTing) is a software tool we developed for collecting, documenting and analyzing HSE data for the Group. At the central level, doCOUNT HSE collects site data and serves as a management tool for compiling reports, identifying areas for improvement and benchmarking. At the site level, doCOUNT is increasingly being used as a management tool.

In order to publish our HSE data in the Annual Report 2001, we have adjusted the collection process. Data was collected in December, and published here are the actual data January through November 2001, plus an estimate for December 2001 based on actual data of December 2000 corrected by the estimated impacts of any changes in production volume/mix, system boundaries or energy mix, etc. In future some data will be collected more frequently (monthly, quarterly or biannually, depending on the data and activity of the individual sites). Not only do we expect this to increase data quality, but it also allows for early corrective action if unfavorable trends evolve.

We continue to take measures to further improve the overall data quality, including training at site and regional meetings, on the Intranet, through telephone consultations and conferences. We also provide feedback to the site on trends and consolidated data, assessments of new data, and we ensure that site management certifies the accuracy of the final data. These measures to increase data quality

will improve our trend analysis to account for annual fluctuations of 1 - 2 percent (currently considered not significant within current system boundaries).

Waste

Waste quantities are largely related to production volume and product yield. Our waste reduction strategy is to first prevent, then reduce, recycle or safely dispose of waste, in that order.

Hazardous waste, which originates mainly from chemical production processes, increased 6%, in line with the increase of production in the Generics sector.

Non hazardous waste (similar to and treated the same as household waste) was unchanged from last year, although there was an increase in the amount of compostable waste mainly from the production of baby food and nutrition products.

Safety/Health

We sincerely regret the occurrence of the first fatality since Novartis was established, when one of our 5 500 sales representatives in the USA died as a result of an automobile accident, and our sympathies go to friends and family of the deceased.

Overall, the Novartis Group continued to reduce accident frequency (lost-time accident rate) and accident severity (lost workday rate). Data collected from all reporting sites (totaling 80% of employees) showed that accident frequency dropped from 0.93 in 2000 to 0.72 accidents per 200 000 hours worked in 2001.

Environmental impact data

Our emissions cause different environmental impacts depending on the quality and specific effect of the emitted substance. We quantify these impacts using a scientific method, Eco-indicator 95 (www.pre.nl). This enables us to understand the relative importance of Novartis impacts and to set priorities for improvement. Currently, we assess impacts only from within our system boundaries.

All major environmental impacts were reduced again in 2001. However, the contribution to summer smog increased significantly due to the 2 recently acquired sites with signifiant contributions to SO_2 and halogenated solvent emissions. The positive trend without these new sites is shown as well.

Greenhouse Effect (global warming) Occurs when heat by the sun is trapped in the earth's atmosphere by "greenhouse gases" such as CO_2, methanes, chlorofluorocarbons (CFCs and H-CFCs) and nitrous oxide.

Summer Smog Caused by the reaction of sunlight with solvents and NO_x, from industrial and non-industrial sources.

Winter Smog Caused by SO_2 and particulates.

Acidification Generation of acids in the atmosphere caused by the NO_x and SO_2 emissions from burning fossil fuels. Acids are either deposited directly onto the earth's surface or fall as acid rain.

Eutrophication Overfertilization of aquatic ecosystems caused by nitrate and phosphate run-offs. NO_x air emissions are also a contributor.

Heavy Metals Poisonous to human beings and ecosystems.

This graph shows the HSE performance of Novartis in comparison to other pharmaceutical companies (based on 2000 data). Points outside the central circle indicate performance worse than average. Data are normalized with sales.

Benchmarking

Although there is no universal reporting standard for benchmarking and much depends on the criteria used, benchmarking nevertheless provides information about our performance, particularly if it is conducted among companies whose activities are similar to ours. This is the second year that performance-benchmarking data is published, and we expanded the data base to include all available published HSE data from 20 pharmaceutical and consumer health companies. Data were normalized with sales (lost-time accident data are normalized with the number of employees). A margin of error exists based on data quality and interpretation. Furthermore, many factors irrelevant to actual environmental performance affect the comparison (product mix, backward integration, outsourcing of production and infrastructure activities).

As the chart shows, the areas where we perform under industry average are water consumption (due to large amounts of water used in fermentation processes), non-hazardous waste (largely due to fruit/vegetable waste from our Consumer Health business), hazardous waste and halogenated solvent emissions which originate from manufacturing of pharmaceutical products. Areas where we perform on par with industry average are energy consumption and lost-time accident rates. Areas where we perform above industry average are emissions of CO_2, SO_2 and NO_X (due to our almost complete conversion to natural gas and some external energy generation), non halo-genated solvents and CFC emissions. Hazardous waste generated and halogenated solvent emissions are targets of specific action programs in 2002 in the sites concerned.

Statement of the Verifiers on the Novartis HSE Reporting 2001

Arthur D. Little

Novartis International AG has commissioned Arthur D. Little International, Inc, to verify the sections of the 2001 Novartis Annual Report addressing Health, Safety and Environment.

Scope and process of the verification

The objective was to verify how complete, accurate and clear reporting on the HSE impacts of Novartis business operations is. In the evaluation, both the data quality and the suitability of the process for generating the information was considered. Basis of the verification was information collected in interviews with Corporate and with Sector HSE functions. An analysis of the underlying data collection as designed by Novartis and of its implementation, an analysis of the data contained in the Report, visits to two sites and telephone interviews with four further sites were also conducted.

Summary

The information gathered in the verification process indicates that the 2001 Annual Report contains a fair summary of relevant HSE impacts at Novartis' own sites. Both the reporting and management of these impacts has improved relative to 2000.

As in past HSE reports, the HSE impacts in the product life cycle that are generated outside of Novartis' sites still are neither covered nor managed in the same quality as internal processes. This challenging task needs to be addressed also in view of the commitments in the Policy on Corporate Citizenship.

Changes relative to the 2000 Report

The integration of business, societal and HSE reporting in one document is a powerful step to communicate Corporate Citizenship performance as an integral part of all activities. The integration of these reports into the Annual Report makes it even more important to limit information to aggregated but relevant key factors. Good examples are given such as the benchmarking of Novartis performance against other pharmaceutical companies. Sufficient internet links to more detailed information are missing.

The data quality regarding HSE impacts of sites has improved, due to increased management attention and the implementation of processes to ensure correct data quality. Continuous improvements on the reporting system should increase the data quality further.

The clarity of the HSE goals set and of performance against these have also improved. The rigor with which these HSE impacts are managed appears higher and closer to the ambitions stated. The HSE objectives for 2002 are more often quantitative and sector-wide than the objectives for 2001. This makes HSE goals and performance more transparent in external reporting.

Specific impact areas

An example of the omission of relevant life cycle impact is the CO2 emission since it addresses only the emissions from energy generated by Novartis. To ensure that CO2 emissions from energy consumed from external suppliers is also addressed we propose to redefine the CO2 target accordingly.

Improvement of supplier and third party manufacturing HSE performance has become a focus for Novartis, but is not yet addressed by all sectors at the same level.

HSE-Management

In the area of product-related HSE impacts and the tie-in with business objectives, stated principles remain ahead of practice. Examples for the HSE impact of product use are given but have not been consistently addressed across the board.

In the area of HSE management at site-level, the ambition stated in the report has become more consistent with verification results. The ongoing implementation of HSE related management systems at the sites will further improve this consistency.

/s/ DR. ARND HARDTKE	/s/ DR. HARTMUT FISCHER
Dr. Arnd Hardtke	Dr. Hartmut Fischer

January 31, 2002

HUMAN RESOURCES

Human Resources

The new Policy on Corporate Citizenship expands the focus of quantitative reporting beyond Health, Safety and Environment to include the societal aspects of the impact of Novartis on the communities in which we operate. As we state in the policy, Novartis employees are key to our success. Moreover, they are our most important links to society.

One of our primary objectives has been to create an organization that is focused, capable and motivated to deliver sustainable business results and one that is recognized as being a responsible member of the global community. Over the last few years we have seen a substantial increase in our total employee population (especially in marketing and sales). Simultaneously, we have sharpened our focus on promoting gender diversity as well as significantly strengthening our talent pipeline.

The attached table shows that the number of our associates has grown by 5% since 2000. A big proportion of this increase has been due to the strengthening of our sales force in key markets such as the USA and Europe. In the USA the number of sales employees has risen by 15%.

2001 average number of employees by sector

Pharmaceuticals	40 035
Generics	6 798
Consumer Health	12 968
CIBA Vision	7 469
Animal Health	2 045
Corporate	1 005
Total	**70 320**

2001 average number of emloyees by function and region

(Full time equivalents)	Research & Development	Production & Supply	Marketing & Distribution	General & Administration	Total
Europe	5 804	9 875	10 531	4 734	30 944
The Americas	3 043	9 081	11 750	3 083	26 957
Asia/Africa/Australia	741	3 502	7 146	1 030	12 419
Total	**9 588**	**22 458**	**29 427**	**8 847**	**70 320**

2001 personnel costs by function and region

(CHF millions)	Research & Development	Production & Supply	Marketing & Distribution	General & Administration	Total
Europe	694	795	1 032	606	3 127
The Americas	602	699	1 694	532	3 527
Asia/Africa/Australia	88	74	453	89	704
Total	**1 384**	**1 568**	**3 179**	**1 227**	**7 358**

In 2001 we initiated a program to gather globally the demographic data necessary to establish benchmarks relating to the objectives of our Policy on Corporate Citizenship and our UN Global Compact commitment. This new global database includes aspects regarding diversity, social benefits, work-life balance and minimum and local living wage levels. The data compiled so far represents approximately half of Novartis associates world wide and is as yet insufficient to analyse and report the picture in full. Unfortunately, some aspects such as diversity and living wages could not be monitored world-wide, except in markets where this is a legal requirement. Consequently, clear guidelines and standards are now being established and external local support is being sought to solve local problems.

Based on the data available we have initiated various programs to build on gender diversity at all levels in the company. The percentage of women in management is currently estimated to be about 30%, which is a reasonable baseline, but there is ample room for improvement. We have initated programs in several of our countries to increase the number of women holding managerial positions.

Strengthening our Talent Pipeline

Our talent pipeline has been a key area of focus for us. We have established a strong pay for performance culture and have made significant progress on attracting, developing, growing and energizing our talent at Novartis.

Our Performance Management System not only helps us motivate and reward associates for achieving business results but also incentivizes them to demonstrate behavior that helps sustain these excellent results in the long run. We believe this system is an extremely transparent and effective tool that helps managers and employees measure and improve individual and organizational performance.

To strengthen the alignment between shareholder and employee interests we have implemented share option programs for key associates and share ownership programs for associates in Switzerland, the USA and the UK. More countries will adopt similar programs in 2002.

Through implementation of a global process, Organization & Talent Review (OTR), we have significantly improved our ability to identify and develop top talent. This process helps our business leaders review the capability of their organizations and to proactively identify and address key issues. We now post internal job opportunities on our new Global Job Posting System to promote transparency and communicate opportunities to our associates on a worldwide basis.

Learning has been another key area of focus in 2001. Through partnership with leading institutes such as Harvard Business School, we offer customized learning programs for our associates. In addition, we have invested in developing a multi-phase program to support our first line managers build their leadership and managerial capabilities. We are also leveraging intranet technology to spread knowledge through the company quickly and effectively.

To support our business expansion we have attracted many talented people from some of the leading companies across the world. We are now focused on retaining and developing our core talent. It also remains our endeavour to build on our preferred employer status in the "talent marketplace", with Novartis branded as an exciting place to work where employees can realize their professional aspirations.

Today, we can confidently say that our organisation is more customer focused, more innovative and much more performance driven than ever before. We regularly conduct employee surveys to ascertain motivational levels and job satisfaction ratings. For example, a global leadership survey sent to 250 top executives showed that, compared to external benchmarks, Novartis leadership is more positive about innovation and operating efficiency (e.g. in establishing a climate where the traditional way of doing things is regularly reviewed and challenged). The survey also identified big improvements, since 1999, in areas such as "market competitiveness" and "leadership". The biggest challenges (both in relation to

the external norm and the 1999 results) were identified as being "achieving a sustainable balance between work and private life" and "identifying and alleviating stress related reduced effectiveness". First steps to address these challenges have been implemented: Training programs for 2002 include workshops on time management, work-life balance and positive stress management.

Our Humanitarian and Ecological Commitment

Novartis has not identified any major compliance problems within the Group under the standards outlined in the UN Global Compact. Human rights is a new area that Novartis is addressing actively. Thus the focus will be on awareness building and fostering human rights, in the markets where we operate. Novartis can and wants to be part of the solution, fully in the spirit of the UN Global Compact. Regarding our commitments, the following areas have been identified as requiring particular attention: Operations of business partners and suppliers, access to treatment, the commitment to diversity and living wages. Internal processes have been initiated to implement these Policy commitments into business practise.

Code of Conduct

In 2001, the Novartis Code of Conduct, first established in 1999, was amended and distributed to all associates worldwide to reflect our commitment to the UN Global Compact and the new Policy on Corporate Citizenship. In addition, special programs addressing legal compliance in specific areas (Antitrust and Insider Trading) were launched. Audits relating to compliance with the Code were conducted, both in industrialized and in developing countries.

GOVERNANCE OF THE COMPANY

Novartis is fully committed to good corporate governance. In the year 2001 a number of changes have been introduced in the interest of transparency and accountability to our shareholders. The Novartis principles and rules on corporate governance are laid down in the Company's Articles of Incorporation, the Regulations Governing Internal Organization and the Charters of the Board Committees[1]. They are reviewed by the Corporate Governance Committee from time to time with suggestions for amendment forwarded to the Board for decision.

[1] These documents are available upon request to the Corporate Secretary, Dr. Ingrid Duplain.

Role of the Board of Directors and of the Board Committees

The Board of Directors (the "Board") is elected by the shareholders and holds the ultimate decision-making authority of the Company, except for those matters reserved by law or by the Company's Articles of Incorporation to the shareholders.

Decisions are taken by the Board as a whole. To assist the Board in carrying out its duties four committees have been created: the Chairman's Committee, the Compensation Committee, the Audit and Compliance Committee and the Corporate Governance Committee (the "Board Committees").

The Board has delegated the conduct of the day-to-day business operations to the Novartis Executive Committee, which is headed by the Chief Executive Officer.

Functioning of the Board

The primary functions of the Board, as defined in the Swiss Code of Obligations and in the Company's Articles of Incorporation, are

- strategic direction and management of the company;
- accounting matters, financial control and financial planning;

- appointing and dismissing of the members of the Executive Committee and other key executives;
- overall supervision of business operations; and
- setting out the motions to be presented to the Shareholders' Meeting, including the Novartis AG financial statements and the Group's consolidated financial statements.

The agenda for Board meetings is set by the Chairman and Chief Executive Officer. Any member of the Board (the "Directors") may request in writing that an item be included on the agenda.

The Directors receive in advance of Board meetings materials allowing them to prepare for the handling of the items on the agenda.

The Board recognises the importance of being fully informed on material matters involving the Company and its business. Therefore, the Directors are required to hold discussions with officers of the Company, to review materials provided to them, to visit offices and plants and to participate in no less than a majority of the meetings of the Board and its committees.

The Chairman and Chief Executive Officer recommends members of senior management who, at the invitation of the Board, attend Board meetings to report on areas of the business within their responsibility, thereby ensuring that the Board has sufficient information to make

appropriate decisions.

The Board reviews once a year the performance of the Chairman and Chief Executive Officer. The Board also meets in Executive Session from time to time to consider other matters of importance to the business of the Company.

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 are charged with making full reports and recommendations to the Board at its regular meetings.

The meeting agendas of the Board Committees are determined by their chair.

The Board Committee members receive in advance of committee meetings materials allowing them to prepare for the handling of the items on the agenda.

Board and Board Committee Membership

The Board is comprised of 12 persons. The average age of the Directors is 61 and the average tenure is nearly 4.5 years. The Chairman and Chief Executive Officer is the only executive Director.

Messrs. Lippuner and Jetzer were members of the Executive Committee until 1996 and 1999, respectively.

Name	Age	Director since	Term of Expiration
Daniel Vasella, MD	48	1996	2004
Prof. Helmut Sihler	71	1996	2004
Hans-Jörg Rudloff	61	1996	2004
Birgit Breuel	64	1996	2005
Prof. Peter Burckhardt, MD	62	1996	2002
Hans-Ulrich Doerig	61	1996	2002
Walter G. Frehner	68	1996	2004
William W. George	59	1999	2003
Alexandre F. Jetzer	60	1996	2005
Pierre Landolt	54	1996	2002
Heini Lippuner	68	1996	2002
Prof. Rolf M. Zinkernagel, MD	57	1999	2003

Daniel Vasella has been elected by the Board as its Chairman and also to serve Novartis as Chief Executive Officer. The Board has appointed Prof. Helmut Sihler as Vice Chairman and Lead Director. Hans-Jörg Rudloff has been elected Vice Chairman.

During 2001, the Board met five times. All of our Directors attended 90 percent or more of the regularly scheduled and special meetings of the Board and Board Committees on which they served in 2001.

The table below shows the membership of each Board Committee. All Board Committees are comprised of non-executive Directors only with the exception of the Chairman's Committee.

Name	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Daniel Vasella, MD	x*			
Prof. Helmut Sihler	x	x*	x*	x
Hans-Jörg Rudloff	x	x		x

Name	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Birgit Breuel			x	
Prof. Peter Burckhardt, MD				
Hans-Ulrich Doerig			x	
Walter G. Frehner			x	
William W. George	x	x		x*
Alexandre F. Jetzer				
Pierre Landolt				
Heini Lippuner	x			
Prof. Rolf M. Zinkernagel, MD				x

* Chair

The Chairman's Committee

The Chairman's Committee consists of the Chairman and Chief Executive Officer, the two Vice Chairmen one of which is the Lead Director, and such other members as are elected by the Board from time to time.

The Chairman's Committee deals with all matters delegated to it according to its Charter. It prepares the agenda for meetings of the Board and can take any preliminary and required action on behalf of the Board. The Chairman's Committee also interfaces with the Executive Committee of Novartis, specifically approving personnel appointments and financial measures which exceed the authority of the Executive Committee but which do not require approval by the full Board.

The Compensation Committee

The Compensation Committee is composed of three to five independent Directors.

The Compensation Committee reviews and approves the Company's compensation policies and programs, including share option programs and other incentive-based compensation. It is responsible for reviewing and approving the compensation paid to members of the Executive Committee and other selected key executives, and for reviewing the performance of the Chairman and Chief Executive Officer. The Compensation Committee from time to time seeks outside expert advice to support recommendations and decisions.

Audit and Compliance Committee

The Audit and Compliance Committee consists of three to five members. The Board has determined that all of the members of the Committee are independent, as defined by the rules of the New York Stock Exchange. Members of the Committee shall have sufficient financial and compliance experience and ability to enable them to discharge their responsibilities as members.

The Committee's main duties are:

a) To select, evaluate and propose to the Board the external auditors to be nominated for approval by the annual Shareholders' Meeting.

b) To review annually the external audit scope, audit plans and relevant processes, the results of the external audit, and whether recommendations made have been implemented by the Group's management.

c) To discuss with the external auditors the results of the audit, any unusual items or disclosures contained in the audit, and the matters required by US Statement on Auditing Standards No. 61, as amended.

d) To review annually the internal audit scope, audit plans and relevant processes, the results of the internal audit, and whether recommendations made have been implemented by the Group's management.

e) To review with external auditors, internal auditors and the financial and accounting personnel of the Group the accounting policies and financial controls of the Group.

f) To review with management, internal auditors and external auditors any significant risks or exposures the Group may face, and to assess the steps management has taken to minimize such risks to the Group.

g) To review the annual financial statements and annual report to consider whether they conform to accepted accounting principles and the standards set by the Group.

h) To review the processes and procedures for management's monitoring of the Group's compliance with laws, regulations and with the Group's Code of Conduct, as well as major legislative and regulatory developments that may have a significant impact on the Group.

i) To review compliance by management of the Group with those Group policies designated by the Board from time to time, including the Insider Trading Policy.

j) To oversee the Group's participation in the Global Compact.

Corporate Governance Committee

The Corporate Governance Committee consists of three to five independent Directors.

The Committee's main duties are:

a) Develop principles of corporate governance and recommend them to the Board for its approval.

b) Review periodically the principles of corporate governance approved by the Board to ensure that they remain relevant and are being complied with.

c) Review the composition and size of the Board in order to ensure the Board has the proper expertise and its membership consists of persons with sufficiently diverse backgrounds.

d) Determine the criteria for selection of the Chairman and Chief Executive Officer, Directors and Board Committee members.

e) Plan for continuity on the Board as existing Directors retire or rotate off the Board.

f) Prepare and annually review succession plans for the Chairman and Chief Executive Officer in case of his resignation, retirement or death.

g) Evaluate the performance of current Directors proposed for re-election and recommend to the Board as to whether Directors should stand for re-election.

h) Conduct an annual evaluation of the Board as a whole.

i) With the Chairman and Chief Executive Officer, periodically review the Charter and composition of each Board Committee and make recommendations to the Board for the creation of additional Board Committees or the change in mandate or dissolution of Board Committees.

j) Ensure that each Board Committee is comprised of Directors suitable for the tasks of the Committee and that each Committee conducts the required number of meetings and makes sufficient reports to the Board on its activities and findings.

Share and Option Ownership

The non-executive directors as a group, based on information available to us, as of December 31, 2001 held 428 620 Novartis shares and 6 256 share options each on 40 registered Novartis shares.

Novartis senior management as a group, based on information available to us, as of December 31, 2001 held 412 350 Novartis shares and 25 023 share options each on 40 registered Novartis shares and 132 397 options on Novartis ADSs.

Compensation

Compensation of non-executive Directors

Non-executive Directors of Novartis received an aggregate amount of compensation in 2001 of CHF 2.8 million. Each Director could elect payment in cash, shares, options, or a combination thereof. In addition, they received an aggregate amount of 22 000 shares with a value of CHF 1.5 million.

Directors are also reimbursed for travel and other related expenses associated with the performance of their duties.

Conflicts of Interests

No Director benefits materially from any contract between a member of the Novartis Group and a third party.

General Compensation Policy

The compensation programs of the Group are designed to attract, develop, retain and motivate the high calibre of executives, managers and associates that are critical to the long-term success of the business. Compensation at Novartis is composed of a base salary that is targeted at a median of comparable companies in the industry, annual cash incentive awards that are based on company and individual performance, and long-term incentive awards that are comprised of share options and other forms of equity participation. Increasingly, we are relying on senior management compensation programs that strongly encourage significant levels of share ownership and put a high proportion of total compensation at risk, subject to individual and Group performance and the appreciation of our shareholder value.

Equity Compensation Plans

Novartis offers Directors, executive officers and other selected employees of Novartis equity compensation plans which include, depending on the plan, share options, share appreciation rights and share grants.

Compensation of Management

The aggregate amount of compensation expensed in 2001 by Novartis in respect of the Executive Committee members and other senior management for services in all capacities, as well as senior managers who retired during 2001, was CHF 11.4 million, of which CHF 9.2 million was salaries and CHF 2.2 million was for cash bonuses. In addition, an aggregate amount of 340 700 shares with an aggregate value of CHF 23.4 million was granted to this group under the various share grant programs. CHF 2.6 million was set aside for pension, retirement and similar benefits. In 2001 senior management members were granted a total of 13 047 share options each on 40 Novartis registered shares with an exercise price of CHF 70 per share or CHF 2 800 per option and 132 397 options on Novartis ADSs with an exercise price of USD 42 per option.

The following is the listing of senior management as of December 31, 2001:

Name	Age	Title	Since
Daniel Vasella, MD*	48	Chief Executive Officer	1996
Raymund Breu*	56	Chief Financial Officer	1996
Thomas Ebeling*	42	Chief Executive Officer Pharmaceuticals	2000
Al Piergallini*	55	Chief Executive Officer Consumer Health	1999
Norman Walker*	49	Head of Human Resources	1998

Name	Age	Title	Since
Urs Barlocher*	59	Head of Legal and General Affairs	1999
Gilbert Wenzel*	45	Head of Strategic Planning and Business Development	2000
Glen Bradley	59	Chief Executive Officer CIBA Vision	1990
Hans-Beat Gürtler	53	Chief Executive Officer Animal Health	1996
Christian Seiwald	46	Chief Executive Officer Generics	2001

* member of the Executive Committee

Report of the Audit and Compliance Committee

The Audit and Compliance Committee reviews the Group's financial reporting process on behalf of the Board of Directors. Management is responsible for the financial statements and the reporting process, including the system of internal controls. The independent auditors, PricewaterhouseCoopers AG, are responsible for expressing an opinion on the conformity of those audited financial statements. The Audit and Compliance Committee is responsible for overseeing the conduct of these activities by the Group's management and the independent auditors.

The Audit and Compliance Committee has discussed with the independent auditors matters required to be discussed. In addition, the independent auditors provided to the Audit and Compliance Committee the written disclosures required by US Independent Standards Board Standard No. 1 (Independence Discussions with Audit Committees), and the Committee and the independent auditors have discussed the auditors' independence from the Group and its management, including the matters in those written disclosures.

In reliance on the reviews and discussions with management and the independent auditors referred to above, the Audit and Compliance Committee recommended to the Board of Directors, and the Board approved, the inclusion of the audited financial statements in the Group's Annual Report for the year ended December 31, 2001.

Audit Fees

The Group paid PricewaterhouseCoopers approximately CHF 11.5 million for professional services rendered in connection with the audits of the Group's annual financial statements.

Financial Information Systems Design and Implementation Fees

The Group did not retain PricewaterhouseCoopers for professional services rendered in connection with financial information systems design and implementation.

All Other Fees

The Group paid PricewaterhouseCoopers approximately CHF 58.3 million for all other professional services rendered including management consulting services, tax services, human resource consulting services, accounting and due diligence services, and other accounting and auditing services.

/s/ Dr. Helmut Sihler
Prof. Dr. Helmut Sihler

January 30, 2002

Dr. Daniel Vasella[1]

Swiss, age 48

Chairman and CEO

Daniel Vasella is Chairman and Chief Executive Officer (CEO) of Novartis AG. He was appointed Chairman in April 1999, having served as President and Head of the Executive Committee since the merger that created Novartis in 1996.

Daniel Vasella is also a member of the Board of Directors of the Credit Suisse Group, the Supervisory Board of Siemens AG, and the Chairman's Council of Daimler Chrysler.

Before the Novartis merger, Daniel Vasella, a medical doctor, was Chief Executive Officer of Sandoz Pharma Ltd. and a member of the Sandoz Group Executive Committee. From 1988 to 1992 he was with Sandoz Pharmaceuticals Corporation in the USA, prior to which he held a number of medical positions in Switzerland.

Walter G. Frehner[3]

Swiss, age 68

Walter Frehner was a member of the Board of Ciba-Geigy AG from 1994 to 1996. He has been a member of the Board of Novartis since the company's creation through the merger of Ciba-Geigy and Sandoz in 1996. In 2001 he became a member of the Audit and Compliance Committee.

In 1996 he retired from his position of Chairman of the Board of Directors of Swiss Bank Corporation (now UBS). Walter Frehner is also a board member of Schindler and Bâloise Insurance.

Prof. Dr. Helmut Sihler[1,2,3,4]

Austrian, age 71

Vice Chairman and Lead Director

In 1983, Helmut Sihler was elected to the Board of Ciba-Geigy AG. He became a member of the Board of Novartis when the company was created by the merger of Ciba-Geigy and Sandoz in 1996. Since the Annual General Meeting in April 1999 he has acted as Lead Director and, in May 1999, he became a member of the newly formed Chairman's Committee and the Compensation Committee; he also acts as Chairman of the Audit and Compliance Committee and has been a member of the newly formed Corporate Governance Committee since 2001.

Helmut Sihler is also Chairman of Porsche AG, Stuttgart.

He studied philology and law at Graz, Austria, and Burlington, VT, USA.

---

1 Member of the Chairman's Committee

2 Member of the Compensation Committee

3 Member of the Audit and Compliance Committee

4 Member of the Corporate Governance Committee

William W. George[1,2,4]

American, age 59

William W. George was elected as a member of the Board of Novartis AG in 1999. In 2001 he became a member of the Chairman's Committee as well as chairman of the newly formed Corporate Governance Committee.

He received a BSIE from Georgia Tech in 1964 and an MBA from Harvard University in 1966.

William W. George is Chairman of the Board of Medtronic, Inc., the world's leading medical technology company and Visiting Professor of Management at Ecole Polytechnic Federale Lausanne and at the International Institute of Management Development.

Hans-Jörg Rudloff[1,2,4]

German, age 61

Vice Chairman

Hans-Jörg Rudloff was elected to the Board of Sandoz AG in 1994. He has served as Vice Chairman of the Board of Novartis since the company's creation in 1996. In May 1999 he became a member of the newly formed Chairman's Committee and the Compensation Committee and since 2001 he is a member of the newly formed Corporate Governance Committee.

Hans-Jörg Rudloff also serves on the boards of TBG Group (Thyssen-Bornemisza Group), the Advisory Board of Landeskreditbank Baden-Wurttemberg, the Beirat of EnBW (Energie Baden-Wurttemberg) among others. Hans-Jörg Rudloff studied economics at the Universities of Berne and Grenoble. He served as Chairman and CEO of Credit Suisse First Boston and was a member of the Executive Board of Credit Suisse. He has been Chairman of the Executive Committee of Barclays Capital since 1998.

Alexandre F. Jetzer

Swiss, age 60

Alexandre Jetzer has been serving as a member of the Board of Directors since 1996. He was a member of the Executive Committee Novartis AG until 1999. Before the Novartis merger Alexandre Jetzer had been a member of the Sandoz Group Executive Committee since 1981.

Mr. Jetzer is also on the Board of Directors of Bank Clariden, Zurich.

He holds Master Degrees in law and in economics from the University of Neuchâtel and is licensed as an attorney-at-law.

Dr. h.c. Birgit Breuel[3]

German, age 64

From 1994 to 1996 Bigit Breuel was a member of the Board of Ciba-Geigy AG. She has been a member of the Board of Novartis since the company's creation through the merger of Ciba-Geigy and Sandoz in 1996.

In May 1999 she became a member of the Audit and Compliance Committee of Novartis AG.

Birgit Breuel studied politics at the universities of Hamburg, Oxford and Geneva. She was Minister of Economy and Transport (1978-86) and Minister of Finance (1986-90) of Lower Saxony in Germany. In 1990, Birgit Breuel was elected to the executive board of the Treuhandanstalt whose president she became in 1991. From 1995 to 2000, she acted as the general commissioner and CEO of the world exhibition EXPO 2000 in Hannover, Germany.

Pierre Landolt

Swiss, age 54

Since 1986, Pierre Landolt has been a Board member of Sandoz and, following the merger with Ciba-Geigy in 1996, of Novartis AG. He is also a Board member of Syngenta AG and of the Syngenta Foundation for Sustainable Agriculture.

Pierre Landolt studied law at the University of Paris-Assas. Since 1997 he has been Associate and Chairman of Axial Par Ltda, Sao Paulo, a company investing in sustainability. In 2000 he was co-founder of Eco Carbone LLC, a company focused on the development of carbon sequestration processes in Europe, Africa and South America.

Prof. Dr. Peter Burckhardt

Swiss, age 63

Peter Burckhardt was elected to the Board of Novartis AG in 1996.

He studied medicine at Basel and Hamburg universities, was trained in internal medicine and endocrinology in Lausanne and Boston, USA, and became full professor in internal medicine and chairman of the Department of Internal Medicine at the University Hospital of Lausanne in 1982. He was president of the Swiss Internists' Society, is a member of the boards of several national and international scientific societies, associations and institutions. He is Chairman of the National Societies of the International Foundation of Osteoporosis. He is an international expert in nutrition and bone diseases.

Heini Lippuner[1]

Swiss, age 68

In 1986 Heini Lippuner became a member of the Executive Committee of the Ciba-Geigy Group and took over as its Chairman and Chief Operating Officer in 1988. He stepped down in 1996 and was elected to the Board of the newly created Novartis. Since May 1999 he has also been a member of the Chairman's Committee.

Heini Lippuner is also a board member of Bühler AG and serves on a number of advisory boards.

Dr. Hans-Ulrich Doerig[3]

Swiss, age 61

Hans-Ulrich Doerig was elected to the Board of Novartis AG in 1996. In May 1999 he became a member of the Audit and Compliance Committee of the Board.

He studied at the St. Gallen Graduate School (HSG). Hans-Ulrich Doerig is Vice Chairman of the Executive Board and Group Chief Risk Officer of Credit Suisse Group. He also serves as Board Member of Zurich University.

He has published various articles and books on finance.

Prof. Dr. Rolf M. Zinkernagel[4]

Swiss, age 57

Rolf Zinkernagel was elected to the Board of Novartis AG in 1999. Since 2001 he has been member of the newly formed Corporate Governance Committee of the Board.

He studied medicine at Basel University. Since 1992 he has been Professor and Director of the Institute for Experimental Immunology, University of Zurich.

Prof. 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.

Honorary Chairmen

Dr. Alex Krauer
Dr. Marc Moret
Dr. Louis von Planta

Corporate Secretary

Dr. Ingrid Duplain

OPERATING AND FINANCIAL REVIEW

Key financial developments

Group sales from continuing activities increased 14% in local currencies, 10% in Swiss francs, reaching CHF 32.0 billion in 2001.

Group sales driven by Pharmaceuticals sector, which achieved 15% growth in local currencies and 11% in Swiss francs.

Operating income from continuing activities reached CHF 7.3 billion, an increase of 8% in Swiss francs compared to 2000.

Net income from continuing activities totals CHF 7.0 billion: +8% compared to 2000.

Strategic acquisition of 21.3% of the voting shares of Roche Holding AG.

Second share buy-back completed of CHF 4.0 billion.

CHF 5.3 billion raised through innovative equity and debt instruments to maintain financial flexibility.

Free cash flow from continuing activities excluding the acquisition of product and marketing rights and the Roches take: +25% compared to 2000.

	2001 CHF millions	2000 CHF millions	% Change
Sales from continuing activities	32 038	29 112	10
Operating income from continuing activities	7 277	6 727	8
Net income from continuing activities	7 024	6 511	8
Change in net liquidity	-183	1 783	
Equity at year-end	42 245	36 862	15
Earnings per share on continuing activities (CHF)	2.73	2.49	10
Dividends per share (CHF)	0.90	0.85	6

The 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 Accounting Standards (IAS). For a discussion of the significant differences between IAS and US GAAP, see note 33 of the consolidated financial statements.

Factors affecting results

The global healthcare market is growing rapidly due to, among other reasons, the aging population in developed countries, unmet needs in many therapeutic areas (such as cancer and cardiovascular disease), the adoption of more industrialized lifestyles in emerging economies, and increased consumer demand fuelled by broad and rapid access to information. At the same time, the healthcare industry is coming under pricing pressures as costs come under closer scrutiny by payers, both public and private.

Novartis Group revenues are directly related to its ability to identify high performing products while they are still in development and to market them quickly and effectively. Research and development takes on crucial importance in this environment as Novartis, like its competitors, searches for efficacious and cost-efficient pharmaceutical solutions to health problems. The necessity for broad-based resources adequate to access the full range of new platform technologies has been among the reasons for the consolidation across the industry, and has also spawned the growing number of collaborative relationships between leading companies and niche players at the forefront of their particular technology areas. The growth in new technology, particularly genomics, will almost certainly have a fundamental impact on the pharmaceutical industry as a whole, and upon the Group's future development.

The competitive conditions in the pharmaceutical industry have intensified as a result of regulation, price reductions, reference prices, parallel imports, higher patient co-payments and increased pressure on physicians to limit prescribing. In the future, pressure on the Novartis Pharmaceuticals sector and other pharmaceutical companies to lower prices is expected to increase. The pressure on prices is influenced primarily by the following factors: government actions that reduce patient reimbursement, restrict physicians' prescribing levels, increase the use of generic products and impose overall mandatory price cuts; the introduction of new, technologically innovative products and devices by competitors; and growing parallel imports, mainly in the EU.

Exchange rate exposure also affects the Group's results as Novartis has both sales and cost exposure in many currencies other than the Swiss franc. This gives rise to both transaction and translation exposure when results and foreign subsidiary balance sheets are translated into the Group's Swiss franc consolidated financial statements. Inflation has not had a significant effect on the Group's results.

Results of operations from continuing activities

To facilitate comparison of the financial results, the following table shows selected income statement data of the Group on a continuing activities basis (excluding the Agribusiness sector divested

in November 2000 and taking into account an allocation of non-operating items such as financial expense and tax charges to the discontinued activities):

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change in %
Sales from continuing activities	32 038	29 112	10
Cost of goods sold	-7 886	-7 316	8
Marketing and distribution	-11 098	-9 556	16
Research and development	-4 189	-4 011	4
Administration and general overheads	-1 588	-1 502	6
Operating income from continuing activities	7 277	6 727	8
Income from associated companies	139	97	43
Financial income, net	1 067	1 216	-12
Income before taxes and minority interests	8 483	8 040	6
Taxes	-1 440	-1 504	-4
Income before minority interests	7 043	6 536	8
Minority interests	-19	-25	-24
Net income from continuing activities	**7 024**	6 511	8

In Swiss francs, Group sales in 2001 increased by 10% over 2000 to CHF 32.0 billion (14% in local currencies); operating income grew by 8% to CHF 7.3 billion; net income also increased by 8% to CHF 7.0 billion and free cash flow (excluding acquisitions of subsidiaries, 21.3% of the voting shares of Roche Holding AG and marketing and product rights) by 25% in Swiss francs to CHF 4.1 billion.

47% of sales were generated in the NAFTA region (43% in the USA), 32% in Europe and 21% in the rest of the world.

Growth from continuing activities was driven by a volume increase of 8%. All sectors except Generics benefited from price increases which in total amounted to 2%. The sales increase due to acquiring new products and subsidiaries was 4%. The sales performance in Swiss francs suffered from a 4% unfavorable currency effect as the Swiss franc rose against the yen by an average of 12% and against the Euro by 3%.

Overall, Pharmaceuticals accounted for 63% of Group's total turnover. Within the remaining businesses Generics contributed 7% of the total Group sales, Consumer Health 21%, CIBA Vision 6% and Animal Health 3%.

The operating margin from continuing activities in 2001 was 22.7% of sales, a decrease of 0.4 percentage points compared with 2000 (23.1%). Although cost of goods sold (+8%) and research and development expenses (+4%) increased at a lower rate than sales, marketing and distribution expenses (+16%) increased significantly more than sales. Overall, marketing and distribution expenses reached 35% of sales (2000: 33% of sales) due to investments associated with sales force enhancements and new product launches, particularly in Pharmaceuticals. Research and development expenses as a percentage of sales fell slightly over the year from 13.8% in 2000 to 13.1% on account of the strong sales growth.

Sales

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change in CHF %	Change in local currencies %
Sales				
Pharmaceuticals	20 181	18 150[1]	11	15
Generics	2 433	1 973[1]	23	26
Consumer Health	6 675	6 514[1]	2	4
CIBA Vision	1 787	1 392[1]	28	33
Animal Health	962	1 083[1]	-11	-7
Sales from continuing activities	32 038	29 112[1]	10	14
Sales from discontinued Agribusiness activities[2]		6 693[1]		
Group sales	**32 038**	35 805[1]		

1 Restated to reflect the transfer as of January 1, 2001 of the Ophthalmics business from CIBA Vision to the Pharmaceutical sector and the switch of certain products between sectors.

2 Agribusiness: Crop Protection and Seeds businesses spun-off on November 6, 2000.

Pharmaceuticals: Sales increased by 11% in Swiss francs or by 15% in local currencies to CHF 20 181 million in 2001 from CHF 18 150 million in 2000. In the USA, where 43% of turnover was generated, sales increased substantially by 24% reaching CHF 8 636 million. This performance was driven by numerous product launches, particularly in the USA, most notably *Glivec/ Gleevec* (chronic myeloid leukemia) with sales of CHF 257 million in less than 8 months. As a result oncology sales expanded by 28% in local currencies. The impact of acquisitions, principally *Famvir* (antivirals) acquired late in 2000, contributed 2% to sales growth. Continued marketing focus on key products such as *Diovan/Co-Diovan* (hypertension), *Lotrel* (hypertension), *Lamisil* (fungal infections) and *Exelon* (Alzheimer's) was also a major factor in the sales growth.

Diovan/Co-Diovan (hypertension) surpassed *Sandimmun/ Neoral* (transplantation) as the leading product with CHF 1 880 million in sales (+58% in local currencies). *Diovan*, an angiotensin-2 receptor blocker, took the leadership position in new prescriptions from Cozaar® (the competitor product by Merck) in the USA. It is the only drug of its class to have shown a benefit in heart failure, for which it received an approvable letter from the US FDA for this indication. *Lotrel* (hypertension) another key product in the cardiovascular therapeutic area continued to expand its segment share in new prescriptions to 22% and achieved sales of CHF 813 million, an increase of 48% in local currencies. *Lotrel* sales were also the key driver behind the performance of the *Cibacen* group which achieved total sales of CHF 1 518 million, an increase over last year of 22% in local currencies. The decline through generic erosion or new competition continued to be limited for both *Sandimmun/Neoral* (-7% in local currencies) and *Voltaren* (-8% in local currencies). *Sandimmun/Neoral* achieved sales of CHF 1 829 million and *Voltaren* of CHF 1 066 million. *Aredia* (bone metastasis) expanded beyond last year's sales and reached CHF 1 270 million, although the first competing generic products entered the market at the beginning of December. The follow-on product *Zometa* received approval during 2001 both in Europe and in the USA for its first indication, hypercalcemia of malignancy. Approval for bone metastasis, its second indication, is pending in both the USA and Europe. Combined *Aredia/Zometa* sales are expected to decline slightly in 2002 as *Zometa* will not yet fully compensate for the anticipated decline in *Aredia* sales. Overall, the top ten products reached CHF 11 988 million reflecting an increase of 13% in local currencies and the top 20 products expanded sales by 19% to CHF 15 596 million.

Top twenty Pharmaceutical Products - 2001

	% Change

Brands	Therapeutic Area	USA CHF Millions	% Change in Local Currencies	Rest of World CHF Millions	% Change in Local Currencies	Total CHF Millions	% Change in CHF	% Change in Local Currencies
Diovan/Co-Diovan	Hypertension	943	47	937	70	1 880	~~53~~	58
Sandimmun/Neoral	Transplantation	525	-20	1 304	-2	1 829	-11	-7
Cibacen/Lotensin	Hypertension	1 309	28	209	-7	1 518	21[1]	22
(of which Lotrel)		*(813*	*48*			*813*	*47*	*48)*
Lamisil (group)	Fungal infections	730	22	675	16	1 405	15[1]	19
Aredia (group)	Cancer complications	835	17	435	12	1 270	13	15
Voltaren	Inflammation/pain	24	-51	1 042	-7	1 066	-15[1]	-8
Sandostatin	Acromegaly							
(group)		343	38	473	20	816	23	26
Lescol	Cholesterol reduction	388	15	426	18	814	12	17
Miacalcic	Osteoporosis	443	-6	264	10	707	-2	0
Tegretol	Epilepsy	263	9	420	-4	683	-3	1
Top ten products		5 803	17	6 185	10	11 988	9	13
Leponex/Clozaril	Schizophrenia	229	-16	310	5	539	-8	-5
Estraderm **(group)**	Hormone replacement	221	30	263	-7	484	5	6
Exelon	Alzheimer's disease	219	158	184	65	403	100	104
Foradil	Asthma	17		373	16	390	18	21
Visudyne	Wet form of age-related macular degeneration	238	114	139	154	377	123	127
Famvir **(group)**	Antivirals	244	NA	79	NA	323	NA	NA
Nitroderm TTS	Heart disease	3	-55	317	-3	320	-11	-4
Zaditen	Asthma, allergy			265	-6	265	-16	-6
Glivec/Gleevec	Chronic myeloid leukemia	176	NA	81	NA	257	NA	NA
Trileptal	Epilepsy	170	129	80	36	250	84	87
Top twenty total		7 320	29	8 276	12	15 596	15	19
Rest of portfolio		1 316	4	3 269	4	4 585	-1	4
Total		**8 636**	**24**	**11 545**	**10**	**20 181**	**11**	**15**

NA Not applicable as no or insignificant prior year sales.

[1] Restated based on 2000 sales after switches to other sectors.

Generics: Sales increased by 23% in Swiss francs or by 26% in local currencies to CHF 2 433 million from CHF 1973 million in 2000. Strategic acquisitions completed in early 2001 in the USA, Argentina, the UK and Germany account for 20 percentage points of this increase. In the USA (32% of sales), sales increased by 39% in local currencies (4% excluding acquisitions) as a result of reorganization initiatives, the successful integration of the Apothecon acquisition and the launch of generic Prozac® (fluoxetine), for which the sector's US subsidiary, Geneva Pharmaceuticals holds 6-month exclusivity rights to commercialize the 10 mg capsule formulation.

The Generics Pharmaceuticals Business (for finished pharmaceutical products) achieved a sales increase of 39% due to acquisitions, product launches and the global roll-out of the generic version of the combination of amoxicillin and clavulanic acid.

The Industrial Business (active pharmaceutical ingredients and biotech substances) grew by 6% as a result of focussed efforts in high quality intermediates and the expansion of the biotechnology business.

Consumer Health: Sales increased by 2% in Swiss francs or 4% in local currencies, to CHF 6 675 million in 2001 from CHF 6 514 million in 2000. In the USA sales reached CHF 3 283 million (49% of total) reflecting an increase of 4% in local currencies despite the economic slowdown.

Sales of over-the-counter medicines (OTC) rose 5% in local currencies (+2% in Swiss francs) driven by the key brands *Nicotinell/Habitrol* (smoking cessation), *Voltaren Emulgel* (topical pain relief) and *Lamisil Cream* (antifungal).

Medical Nutrition sales increased by 11% in local currencies (+9% in Swiss francs) driven by growth in the Home Care market and the strong performance in Europe and a strong second half in the USA.

Health and Functional Nutrition sales were up 3% in local currencies (+2% in Swiss francs), as solid sales from France and the UK offset a decline in the juice business in Poland. In addition, Gerber reached a new record market share with 75.9% in the US baby/toddler food segment, while *Gerber Care* and *Gerber Wellness* products continued to make progress in a competitive marketplace.

CIBA Vision: Sales increased by 28% in Swiss francs, or 33% in local currencies, to CHF 1 787 million in 2001 from CHF 1 392 million in 2000. Excluding the impact of the Wesley Jessen acquisition, sales increased by 5% in local currencies. The innovative *Focus* range of lenses led by *Focus Dailies* and *Focus Night & Day*, and the acquired *FreshLook* brand of cosmetic lenses were drivers of sales growth. *Focus Night & Day* also became the first high-oxygen extended wear contact lens for up to 30 nights of continuous wear to receive US FDA approval. Innovative product launches including *Aosept Plus/Aosept Clear Care* and *Solo-care Plus*, as well as upcoming specialty lens product developments, are aimed at addressing the overall declining lens care and specialty lens markets.

Animal Health: Sales fell by 11% in Swiss francs, or 7% in local currencies, to CHF 962 million in 2001 from CHF 1 083 million in 2000, as the companion animal market in the USA suffered from inventory reductions at the veterinary clinic level and competitive pressures in the flea product market continued. The farm animal business saw a flat performance as the impact of the foot-and-mouth disease crisis in Europe was felt. The acquired vaccine and aquaculture businesses grew sales, but the size of the businesses is at present too small to offset these events.

Discontinued Agribusiness sector: Agribusiness was only included in the 2000 Group figures up to its spin-off on November 6, 2000.

Operating income

	Year ended Dec. 31, 2001 CHF millions	% of sales	Year ended Dec 31, 2000 CHF millions	% of sales	Change %
Pharmaceuticals	5 677	28.1	5 401[1]	29.8	5
Generics	281	11.5	242[1]	12.3	16
Consumer Health	920	13.8	869[1]	13.3	6
CIBA Vision	174	9.7	100[1]	7.2	74
Animal Health	138	14.3	179	16.5	-23
Corporate and other income/expense	87		-64		
Operating income from continuing activities	7 277	22.7	6 727	23.1	8
Discontinued Agribusiness activities[2]			1 156		
Group operating income	**7 277**		7 883		

1

Restated to reflect the transfer as of January 1, 2001 of the Ophthalmics business from CIBA Vision to the Pharmaceutical sector and the switch of certain products between sectors.

2 Agribusiness: Crop Protection and Seeds businesses spun-off on November 6, 2000.

Operating income from continuing activities

The operating margin on continuing activities was 22.7% of sales, a decrease of 0.4 percentage points compared with 2000 (23.1%).

Pharmaceuticals: Operating income increased 5% to CHF 5 677 million from CHF 5 401 million in 2000. The operating margin fell by 1.7 percentage points to 28.1% primarily due to a 24% increase in marketing and distribution expenses which now represent almost 36% of sales compared to 32% in 2000 as field force and promotion activities were increased due to new product launches. The operating income also includes a charge of CHF 216 million for impairment of pitavastatin marketing rights which were written down from their initial value of CHF 722 million. Research and development expenses fell slightly to 17% of sales compared to 18% in 2000 even though the amount increased by 4% in Swiss franc terms. Further productivity improvements were achieved reducing the cost of goods sold as a percentage of sales.

Generics: Generics had an operating income of CHF 281 million, an increase of 16% compared with CHF 242 million in the prior year. The operating margin declined from 12.3% to 11.5% due to several factors. These included integration costs associated with completing several acquisitions during the year; increased price pressure especially in the USA; costs related to legal actions in the USA and finally stepping up investments in marketing.

Consumer Health: Operating income increased by 6% from CHF 869 million in 2000 to CHF 920 million. Operating margins rose from 13.3% to 13.8% even though a CHF 21 million restructuring charge was incurred due to closure of a UK production site. Furthermore, marketing and distribution expenses as a percentage of sales decreased slightly. Research and development expense remained at 3% of sales with cost of goods sold remaining stable in percentage of sales terms.

CIBA Vision: Operating income increased by 74% from CHF 100 million in 2000 to CHF 174 million in 2001 and operating margin increased from 7.2% in 2000 to 9.7% in 2001. The 2001 operating income includes the impact of the Wesley Jessen business on revenue and costs for the full twelve months of 2001 compared to only three months in 2000. On a comparable basis excluding exceptional integration costs related to the acquisition of Wesley Jessen of CHF 34 million (2000: CHF 110 million) operating income decreased slightly by 1% from CHF 210 million in 2000 to CHF 208 million in 2001 and the operating margin declined from 15.1% in 2000 to 11.6% in 2001 principally on account of goodwill charges.

Animal Health: Operating income fell by 23% from CHF 179 million in 2000 to CHF 138 million principally due to the significantly reduced level of sales particularly in the companion animal business. The operating margin also declined from 16.5% in 2000 to 14.3% in 2001 principally due to a decline in US sales in the higher margin companion animal business.

Corporate and Other Income/Expense: Corporate and other income/expense include the costs of corporate and country management offset by employee benefit, share and share option plan charges levied on the operating companies and credited to corporate other income. In 2001, Corporate and other income/ expense achieved a net income of CHF 87 million compared with a net expense of CHF 64 million in 2000 principally due to higher share and share option charges to sector companies.

Expenses

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change %
Sales from continuing activities	32 038	29 112	10
Cost of goods sold	-7 886	-7 316	8
Marketing and distribution	-11 098	-9 556	16
Research and development	-4 189	-4 011	4
Administration and general overheads	-1 588	-1 502	6
Operating income from continuing activities	**7 277**	6 727	8

Cost of goods sold

Cost of goods sold for continuing activities decreased as a percentage of sales from 25.1% in 2000 to 24.6% in 2001. This was mainly due to continued improvements in productivity and product mix in Pharmaceuticals.

Marketing and distribution

Marketing and distribution expenses for continuing activities as a percentage of sales increased from 32.8% in 2000 to 34.6% in 2001 as significant investments were made in the Pharmaceutical sector field force and promotional activities to support key new products.

Research and development

Research and development expenses for continuing activities as a percentage of sales were 13.1% in 2001 compared with 13.8% in 2000. This is principally due to the slight fall in research and development as a percentage of sales in the Pharmaceuticals sector.

Administration and general overheads

Costs to implement state-of-the-art information technology systems in Pharmaceuticals and other sectors have led to an increase in administration and general overheads by 5.7%. As a percentage of sales from continuing activities however, there was a fall in administration and general overheads to 5.0% in 2001 from 5.2% in 2000.

Net income from continuing activities

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change %
Operating income from continuing activities	7 277	6 727	8
Income from associated companies	139	97	43
Financial income, net	1 067	1 216	-12
Income before taxes and minority interests	8 483	8 040	6
Taxes	-1 440	-1 504	-4

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change %
Income before minority interests	7 043	6 536	8
Minority interests	-19	-25	-24
Net income from continuing activities	**7 024**	6 511	8

Income from associated companies

Income from associated companies are accounted for using the equity method where Novartis owns between 20% and 50% of the voting shares of such companies. Income from associated companies was mainly derived in 2001 from the Group's stakes in Roche Holding AG and Chiron Corporation. The Group's interest in 21.3% of Roche voting shares, which represents a 4% interest in the total Roche equity, was acquired in the first half of 2001. The income statement effect after taking into account the required charges due to additional depreciation and amortization arising from allocating the purchase price to tangible and intangible assets and goodwill, resulted in a pre-tax loss of CHF 39 million. The Group's 41.9% interest in Chiron contributed pre-tax income of CHF 185 million (2000: CHF 97 million). The Group's share of the net income of both Roche and Chiron is based upon analysts' estimates for the full year 2001. Any differences between these estimates and actual results will be adjusted in 2002. In 2001, the Group's income statement includes five quarters results for Chiron as an estimate has been made for Chiron's fourth quarter results. Up to 2000, Chiron was included with a three month lag as only the four quarters through to September 30 were consolidated.

Financial income, net

The Group has realized a financial income, net of CHF 1 067 million in 2001 despite difficult market conditions through successful management of liquid funds and a gain from the sale of US dollar denominated bonds. Net financial income from continuing activities is CHF 149 million lower than the CHF 1 216 million of the prior year. 2000 excludes CHF 125 million of interest expense allocated to the discontinued Agribusiness activity, as it related to the debt that was transferred on spin-off.

Interest income from investments fell from CHF 1 052 million in 2000 to CHF 639 million in 2001 due to lower interest rates and less liquidity, whereas interest expense fell slightly from CHF 385 million in 2000 (excluding CHF 125 million allocated to Agribusiness) to CHF 367 million in 2001.

Increased capital gains realized through sale of US dollar bonds and from other sources contributed an additional CHF 359 million to the financial result. The net result from financial derivative transactions (mainly options and forward contracts) improved by CHF 405 million largely related to the management of liquid funds. The Group does not write uncovered options, so a large part of the net derivative expense is compensated by gains on the underlying assets.

The currency result on exposures held by subsidiaries changed from a gain of CHF 329 million in 2000 to a loss of CHF 118 million in 2001. The major currency losses during 2001 arose from the Turkish and Brazilian devaluations.

Taxes

Despite increased profits, the tax charge of CHF 1 440 million fell by 4% compared to the 2000 taxes on continuing activities of CHF 1 504 million (excluding CHF 316 million allocated to the discontinued Agribusiness activities). Taxes on continuing activities as a percentage of income before tax were reduced to 17.0% compared with 18.7% in 2000. This is due to a change in the geographic mix of taxable income.

Net income

Net income from continuing activities as a percentage of total sales reduced slightly from 22.4% in 2000 to 21.9% in 2001. This decrease was principally due to margin declines in some of the businesses and lower financial income.

Return on average equity fell from 19.5% in 2000 to 17.8% in 2001, owing to the increase in average equity during 2001 due to the increase in retained earnings, the impact of the adoption of IAS 39 and from raising CHF 4 billion of new equity through option instruments.

Results for the total Group

The following table shows selected income statement data of the total Group in 2001 and 2000 including the 2000 discontinued Agribusiness sector. It is these 2000 figures which are included in the attached audited consolidated financial statements:

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions	Change %
Sales	32 038	35 805	-11
Operating income	7 277	7 883	-8
Net income	**7 024**	7 210	-3

Condensed consolidated balance sheets

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions	Change CHF millions
Total long-term assets (excluding marketable securities)	32 585	25 257	7 328
Cash, short-term deposits and marketable securities	21 844	20 523	1 321
Other current assets	12 356	12 416	-60
Total assets	**66 785**	58 196	8 589
Total equity	42 245	36 862	5 383
Financial debts	7 566	6 062	1 504
Other liabilities and minority interests	16 974	15 272	1 702
Total equity and liabilities	**66 785**	58 196	8 589

Total long-term assets increased by CHF 7.3 billion principally due to the CHF 5.2 billion strategic investment in 21.3% of Roche Holding AG's voting shares and the acquisition of certain marketing and product rights.

Total equity increased by CHF 5.4 billion. CHF 4.0 billion was on account of innovative equity instruments with the issue of call options (Low Exercise Price Options LEPOs) and put options on Novartis shares. CHF 1.0 billion of the balance relates to the adoption of IAS 39 concerning the recognition and measurement of financial instruments which requires that unrealized fair value adjustments are recorded in equity. The net income of the year of CHF 7.0 billion increased Group equity, however, this is offset by reductions due to CHF 2.2 billion of dividend payments, CHF 3.9 billion of purchases of treasury shares under the share buy-back program and negative translation effects of CHF 0.6 billion.

Total financial debts increased by CHF 1.5 billion on account of the issue of a EUR 0.9 billion straight bond due 2006. As a result of this the year-end debt/equity ratio increased slightly from 0.16:1 in 2000 to 0.18:1 in 2001.

Novartis has long-term financial debt principally in the form of bonds. At December 31, 2001 it had CHF 1 182 million in convertible bonds outstanding, compared with CHF 1 110 million at December 31, 2000. It also had CHF 2 325 million in straight bonds at December 31, 2001 compared with CHF 961 million at December 31, 2000. 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 and Moody's, as AAA and Aaa for long-term maturities and A1+ and P1 for short-term debt respectively. The Group considers its working capital 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 for each of the periods indicated.

	Year ended Dec 31, 2001 CHF millions	Year ended Dec 31, 2000 CHF millions
Cash flow from continuing operating activities	7 342	6 175
Cash flow from continuing investing activities	-4 675	-50
Cash flow from financing activities	-354	-4 755
Net cash flow from discontinued operating and investing Agribusiness activities		1 271
Translation effect on cash and cash equivalents	31	-119
Change in cash and cash equivalents	2 344	2 522
Change in short- and long-term marketable securities	-1 023	-4 600
Change in short- and long-term financial debt	-1 504	3 861
Change in net liquidity	-183	1 783
Net liquidity at January 1	14 461	12 678
Net liquidity at December 31	**14 278**	14 461

The primary source of liquidity is cash generated from operations. Cash flow from continuing operations increased to CHF 7 342 million in 2001 from CHF 6 175 million in 2000. Of the CHF 1 167 million increase in 2001, CHF 637 million is attributable to reduced funding of working capital.

Cash outflow due to investing activities increased to CHF 4 675 million in 2001 from CHF 50 million in 2000. The CHF 4 625 million increase in 2001 primarily resulted from the CHF 5 177 million spent on acquiring the strategic interest in Roche Holding AG.

Cash outflow due to financing activities fell to CHF 354 million in 2001 from CHF 4 755 million in 2000 thanks mainly to the proceeds from the issue of equity option instruments and from the straight bond.

Overall net liquidity (cash, cash equivalents and marketable securities less financial debt) at December 31, 2001 compared to December 31, 2000 fell slightly by CHF 183 million to CHF 14 278 million.

Novartis has entered into long-term research agreements with various institutions to fund research projects in the future, totaling CHF 1 480 million in the aggregate at December 31, 2001. The Group expects to fund these long-term research agreements with internally generated resources.

The Group uses marketable securities and derivative financial instruments to manage the volatility of its exposures to market risk in foreign exchange, interest rates and market value of liquid investments. The Group's objective is to reduce, where appropriate, fluctuations in earnings and cash flows. The Group sells existing assets or enters into financial operations in respect of future transactions (in the case of anticipatory hedges) it expects to have in the future, based on past experience. It therefore expects that any loss in value for these instruments generally would be offset by increases in the value of the hedged transactions.

Novartis uses the Swiss franc as its reporting currency and is therefore exposed to foreign exchange movements in US dollar, European, Japanese and other Asian and Latin American currencies. Novartis enters into business transactions which are impacted by currency movements. As a result, various contracts are entered into to preserve the value of assets, commitments and anticipated transactions.

Forward contracts and foreign currency option contracts are used to hedge certain anticipated foreign currency revenues and the net investments in certain foreign subsidiaries.

Group free cash flow

The following is a summary of free cash flow from continuing activities using the Group's definition, which excludes the cash received or paid on divestment or acquisition of subsidiaries and minority interests:

	2001 CHF millions	2000 CHF millions
Cash flow from continuing operating activities	7 342	6 175
Purchase of tangible fixed assets	-1 351	-1 179
Purchase of intangible and financial assets	-7 552	-3 088
Sale of tangible, intangible and financial assets	1 825	749
Dividends paid to third parties	-2 194	-2 064
Acquisition of product and marketing rights	826	2 661
Acquisition of 21.3% of the voting shares of Roche Holding AG	5 177	
Free cash flow from continuing activities	4 073	3 254
(excluding Roche stake, product and marketing rights acquisitions)		

Free cash flow on a comparable basis, excluding the impact of the acquisition of the Roche stake and product and marketing rights, increased 25% from CHF 3.3 billion to CHF 4.1 billion.

Group capital expenditure on tangible fixed assets for the 2001 financial year totaled CHF 1 351 million (4.2% of sales), compared to a comparable figure for the continuing activities of CHF 1 179 million (4.0% of sales) in 2000. This level of capital expenditure reflects the continuing investment in production and research and development facilities. The Group intends to maintain spending at 2001 levels in 2002 and to fund these expenditures with internally generated resources.

Free cash flow of the sectors uses the same definition as that for the Group, however no dividends, tax or financial receipts or payments are included in the sector calculation.

Free cash flow

	2001 CHF millions	2000 CHF millions
Pharmaceuticals (before acquisition of product and marketing rights)	6 663	6 372[1]
Generics	46	152[1]
Consumer Health	640	506[1]
CIBA Vision	59	105[1]
Animal Health	195	173
Total continuing sectors	7 603	7 308
Corporate and other (before acquisition of 21.3% of the voting shares of Roche Holding AG)	-3 530	-4 054
Total continuing Group activities	4 073	3 254
Discontinued activities		1 271
Total Group	**4 073**	4 525

[1] Restated to reflect the transfer as of January 1, 2001 of the Ophthalmics business from CIBA Vision to the Pharmaceutical sector and the switch of certain products between sectors.

Earnings before interest, tax, depreciation and amortization (EBITDA)

The Group defines EBITDA as operating income before interest, tax, depreciation of tangible fixed assets and amortization of intangible assets and any related impairment charges.

EBITDA

	EBITDA 2001 CHF Millions	% of Sales	EBITDA 2000 CHF Millions	% of Sales
Pharmaceuticals	6 801	33.7	6 087[1]	33.5
Generics	494	20.3	415[1]	21.0
Consumer Health	1 074	16.1	1 008[1]	15.5
CIBA Vision	372	20.8	218[1]	15.7
Animal Health	167	17.4	203	18.7
Total continuing sectors	8 908	27.8	7 931	27.2
Corporate and other	116		-29	
Discontinued activities			1 486	
Total Group	**9 024**	28.2	9 388	26.2

[1]

Restated to reflect the transfer as of January 1, 2001 of the Ophthalmics business from CIBA Vision to the Pharmaceutical sector and the switch of certain products between sectors.

Enterprise value

This 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.

	2001 CHF Millions	2000 CHF Millions
Market capitalization	152 891	186 703
Minority interests	104	78
Financial debts	7 566	6 062
Less liquidity	-21 844	-20 523
Year end Enterprise value	138 717	172 320
Enterprise value/EBITDA[1]	**15.4**	21.8

[1] Excluding Agribusiness in 2000

Value Added Statement

47.2% of the revenue from sales was used for purchasing goods and services from our suppliers. 23.7% of sales was paid either directly or indirectly to the employees and 15.1% of sales was retained in the business for future expansion. Dividends paid to shareholders represented 6.8% of sales.

Origin of value added

	2001 CHF Millions	2001 % of Sales	2000 % of Sales
Sales	32 038	100.0	100.0
Change in inventory and own manufactured items	-10		
	32 028	100.0	100.0
Services bought from third parties:			
Material costs	-6 377	-19.9	-16.4
Other operating expenses	-8 753	-27.3	-34.3
Gross value added	16 898	52.8	49.3
Depreciation, amortization and impairments on tangible and intangible assets	-1 747	-5.5	-4.2
Financial income	3 412	10.6	7.7
Net value added (NVA)	**18 563**	**57.9**	52.8

Distribution of net value added

Equity strategy and share information

At the 2001 Annual General Meeting the Novartis shareholders agreed a 40 to 1 share split which became effective on May 7, 2001. In exchange for each existing share in Novartis with a nominal value of CHF 20.00 per share every shareholder received 40 Novartis shares with a nominal value of CHF 0.50 per share. The share split now results in a 1:1 exchange ratio between the Novartis registered shares and its ADSs listed on the New York Stock Exchange.

Novartis shares outperformed SMI

In 2001 the equity capital market came under enormous pressure and the Swiss Market Index (SMI) decreased 21% and the Morgan Stanley World Pharmaceutical Index decreased 15% over the year. In this difficult market environment the Novartis share price declined 16% from CHF 71.63 (adjusted for the 40 to 1 share split) at the beginning of the year to CHF 60.00 on December 31, 2001. The market capitalization of Novartis amounted to CHF 152.9 billion on December 31, 2001, compared to CHF 186.7 billion at the end of 2000.

Dividend continuously increased since 1996

The Board is proposing to the Annual General Meeting to increase the dividend payment for 2001 to CHF 0.90 per share (2000: CHF 0.85). The dividends paid out on the outstanding shares will

amount to CHF 2 293 million (2000: CHF 2 194 million), resulting in a pay-out ratio of 33% (2000: 30% for the total Group or 34% on continuing activities). Based on the 2001 year-end share price of CHF 60.00, Novartis' dividend yield is 1.5% (2000: 1.2%). The dividend payment date for 2001 will be on March 26, 2002. With the exception of 265.5 million treasury shares, all issued shares are dividend bearing.

Second share repurchase program completed

In February 2001, the Board of Directors of Novartis initiated a new share repurchase program for an amount of up to CHF 4 billion via a second trading line established on the SWX Swiss Exchange. Up to December 31, 2001 Novartis repurchased 59 million shares for a total of CHF 3.9 billion. A further 1.9 million shares have been purchased up to January 31, 2002 to complete this program. The average price for shares acquired under this program in 2001 was CHF 66. The Board will propose reducing the Group's share capital by an amount corresponding to the repurchased shares at the forthcoming Annual General Meeting in March 2002.

Information on Novartis shares

You can find further information on the Internet at **http://www.novartis.com/investors**.

Chart of Novartis 2001 share price movement

Key Novartis share data[1]

Shares at December 31

	2001	2000
Issued shares	2 885 204 680	2 885 204 680
Of which treasury shares		
Reserved to secure conversion rights on bonds and call options[2]	59 405 716	4 716 640
Not specifically reserved	277 618 704	273 812 440
Treasury shares	337 024 420	278 529 080
Outstanding shares at December 31	2 548 180 260	2 606 675 600
Average number of shares outstanding	**2 571 673 365**	2 613 547 597

Per share information[3] (CHF)

	2001	2000
Earnings per share on continuing activities	2.73	2.49
Basic earnings per share	2.73	2.75
Diluted earnings per share	2.72	2.75
Operating cash flow	2.85	2.91
Year end equity	16.58	14.14
Dividend[4]	0.90	0.85

Key ratios December 31

	2001	2000
Price/earnings (based on continuing activities)	22.0	28.8

	2001	2000
Price/earnings (based on basic EPS)	22.0	26.0
Enterprise value/EBITDA (continuing activities)	15.4	21.8
Dividend yield (%)	1.5	1.2

Key data on US American Depositary Receipts (ADR) program

	2001	2000
Year-end ADS price (USD)	36.50	44.75
ADSs outstanding[5]	101 028 511	55 606 400

1 On March 22, 2001 Novartis AG's Annual General Meeting approved the division of each registered share of Novartis AG into 40 identical registered shares and thereby to change their nominal value from CHF 20.00 each to CHF 0.50 each. The figures for 2000 are adjusted accordingly.

2 4 503 754 shares for the USD 750 million 2.00% 1995/2002 and CHF 750 million 1.25% 1995/2002 convertible bonds of Novartis Capital Ltd., British Virgin Islands and 54 901 962 shares for the call options.

3 Calculated on average number of shares outstanding except year end equity.

4 2001: Proposal to shareholders' meeting.

5 The depositary, JP Morgan Chase Bank, holds one Novartis AG share for every American Depositary Share (ADS) issued.

Share price (CHF)

	2001	2000
Year-end	60.00	71.63
Highest	74.15	73.75
Lowest	54.95	48.45
Year-end market capitalization (CHF millions)	**152 891**	186 703

Trading

The shares are listed in Switzerland, and traded on virt-x, the European blue chip platform and the ADSs (American Depositary Shares) are listed on the New York Stock Exchange. The shares are also traded on the SEAQ International, London.

Symbols

	virt-*x* (Reuters/Bloomberg)	SEAQ (Bloomberg)	NYSE (Reuters/Bloomberg)
Shares	NOVZn.VX/NOVZN SW	NOVD LI	
ADSs			NVS

Widely dispersed shareholdings

Novartis shares are widely held. As of December 31, 2001, Novartis had approximately 165 000 shareholders (2000: 160 000) registered in its share register. 78% of the shares are held by Swiss nationals (2000: 79%). Based on its share register Novartis believes that approximately 11% of its shares are held by approximately 1 800 registered holders in the USA (2000: 8% and 1 000 registered holders, respectively). Since certain of the shares are held by brokers and other nominees, the above numbers may not represent the actual number of shares which are beneficially held by US and Swiss persons.

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 December 31, 2001	% Holding of share capital December 31, 2000
Emasan AG, Basel	3.8	3.8
Novartis Foundation for Employee Participation, Basel	3.5	3.2
Swiss Life Insurance and Pension Company, Zurich	1.0	2.1

Introduction of the Euro

Novartis implemented dual currency reporting (legacy national currencies and Euro) on January 1, 2000 and has not experienced any operational or technological difficulties with regard to the introduction of the Euro.

The Group believes that the introduction of the Euro in January 2002 will reduce its cost of bearing foreign currency exchange risk and will diminish uncertainties relating to currency fluctuations from export sales within the European Monetary Union. The foreign currency exposure from transactions in US dollar or Japanese yen or other currencies outside the European Monetary Union will not be changed by the introduction of the Euro.

Exchange rate exposure and risk management

Novartis transacts its business in many currencies other than the Swiss franc.

As a result of the Group's foreign currency exposure, exchange rate fluctuations have a significant impact in the form of both translation risk and transaction risk on its income statement. Translation risk is the risk that the Group's consolidated financial statements for a particular period or as of a certain date may be affected by changes in the prevailing rates of the various currencies of the reporting subsidiaries against the Swiss franc. Transaction risk is the risk that the currency impact of transactions executed in currencies other than the subsidiary currency may vary according to currency fluctuations.

Quantitative and qualitative disclosures about market risk

	Local currencies %		CHF %	
	2001	2000	2001	2000
Growth and currency contributions (continuing activities):				
Sales	14	8	10	15
Operating income	9	2	8	6
Net income	8	5	8	8
	Sales %		**Costs %**	
	2001	**2000**	**2001**	**2000**
Sales and operating costs by currencies:				
USD	45	44	31	33
EUR	23	24	22	23
CHF	5	6	26	26
JPY	8	8	5	5
Other	19	18	16	13
	Liquid funds %		**Financial debt %**	
	2001	**2000**	**2001**	**2000**

	Liquid funds %		Financial debt %	
Liquid funds and financial debt by currencies:				
USD	8	27	46	45
EUR	35	31	4	15
CHF	55	41	21	30
JPY			24	7
Other	2	1	5	3

On average in 2001, the Swiss franc was stronger against the Japanese yen, Euro and British pound, yet remained almost at the same level against the US dollar. The total negative currency effect on continuing sales growth was 4% and the total negative impact on continuing operating income growth was 1%.

On average in 2000, the Swiss franc was weaker against the US dollar, but strengthened against the currencies participating in the Euro. The total positive currency effect on continuing sales growth was 7% and the total positive impact on continuing operating income growth was 4%.

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. Management 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 is deemed 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. 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. The Group only sells existing assets or enters into transactions and future transactions (in the case of anticipatory hedges) which 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 rates: The Group uses the Swiss franc as its reporting currency and is therefore exposed to foreign exchange movements, primarily in US, European, Japanese and other Asian and Latin American currencies. Consequently, it enters into various contracts which change in value as foreign exchange rates change, to preserve the value of assets, commitments and anticipated transactions. It 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 the currency exchange rates. In the very long term, however, the difference in the inflation rate should match the exchange rate movement, so that the market value of the real assets abroad will compensate the change due to currency movements. For this reason, the Group only hedges the net investments in foreign subsidiaries in exceptional cases.

Commodities: The Group has only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by its 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 materiality levels. Accordingly, it does not enter into significant commodity future, forward and option contracts to manage fluctuations in prices of anticipated purchases.

Interest rates: The Group manages its net exposure to interest rate risk through the proportion of fixed rate debt and variable rate debt in its total debt portfolio. To manage this mix, it may enter into interest rate swap agreements, in which it exchanges the 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 return on investment), their market potential, their management and their competitors. Call options are written on stocks which it has, and put options are written on equities which it wants to buy and for which cash has been reserved.

Management summary: Use of the above-mentioned derivative financial instruments has not had a material impact on the Group's financial position at December 31, 2001 and 2000 or its results of operations for the years ended December 31, 2001 and 2000.

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 interest rate-sensitive financial instruments, the loss in pre-tax earnings of its foreign currency price-sensitive derivative financial instruments as well as the potential ten-day loss of its equity holdings. It uses a ten-day period because it is assumed that not all positions could be undone in a single day, given the size of the positions. The VAR computation includes its debt, short-term and long-term investments, foreign currency forwards, swaps and options and anticipated transactions. Foreign currency trade payables and receivables and net investments in foreign subsidiaries are excluded from 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 fair value of the Group's interest rate-sensitive instruments, primarily debt and investments of liquid funds under normal market conditions, the estimated potential

ten-day loss in pre-tax earnings from foreign currency instruments under normal market conditions, and the estimated potential ten-day loss on its equity holdings, as calculated in the VAR model, follow:

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions
Instruments sensitive to foreign currency rates	226	34
Instruments sensitive to equity market movements	224	164
Instruments sensitive to interest rates	64	18
Total of all instruments	324	241

The average, high, and low VAR amounts for 2001 are as follows:

	Average CHF millions	High CHF millions	Low CHF milllions
Instruments sensitive to foreign currency rates	235	548	94
Instruments sensitive to equity market movements	396	642	224
Instruments sensitive to interest rates	39	71	23
Total of all instruments	515	817	266

The VAR computation is a risk analysis tool designed to statistically estimate the maximum probable ten-day loss from adverse movements in interest rates, foreign currency rates and equity prices under normal market conditions. The computation does not purport to represent actual losses in fair value or 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 present these VAR results to be 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 its future results of operations or financial position.

In addition to these VAR analyses, the Group uses stress-testing techniques. Such stress-testing is aimed at reflecting a worst case scenario. For these calculations, it uses the worst movements during a period of six months over the past 20 years in each category. For 2001 and 2000, the worst case loss scenario was configured as follows:

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions
Bond portfolio	895	96
Money market and linked financial instruments	457	760
Equities	817	1 539
Foreign exchange risks	151	449
Total	**2 320**	2 844

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions

In the Group's risk analysis, it considered this worst case scenario acceptable inasmuch as it could reduce the 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.

The major financial risks are managed centrally by Novartis Group Treasury. Only residual risks and some currency risks are managed in the subsidiaries. The collective amount of the residual risks is however below 10% of the global risks.

Novartis has a written Treasury Policy, has implemented a strict segregation of front office and back office controls and the Group does random checks of its positions with the counterparties. In addition, internal audits of the treasury function are performed at regular intervals.

Five Year Summary of Financial Data 1997 2001

CHF millions unless indicated otherwise		2001	2000	1999	1998	1997
Sales		32 038	35 805	32 465	31 702	31 180
Change relative to preceding year	%	-10.5	10.3	2.4	1.7	-13.9
Pharmaceuticals		20 181	18 150	15 275	14 501	14 112
Change relative to preceding year	%	11.2	18.8	5.3	2.8	21.5
Generics		2 433	1 973	1 823	1 529	1 452
Change relative to preceding year	%	23.3	8.2	19.2	5.3	18.0
Consumer Health		6 675	6 514	5 752	5 788	5 866
Change relative to preceding year	%	2.5	13.2	-0.6	-1.3	-1.0
CIBA Vision		1 787	1 392	1 632	1 505	1 423
Change relative to preceding year	%	28.4	-14.8	8.4	5.8	18.0
Animal Health		962	1 083	927	901	893
Change relative to preceding year	%	-11.2	16.8	2.9	0.9	6.2
Discontinued Agribusiness			6 693	7 056	7 478	7 434
Operating income		7 277	7 883	7 343	6 920	6 688
Change relative to preceding year	%	-7.7	7.4	6.1	3.5	15.7
As a % of sales	%	22.7	22.0	22.6	21.8	21.4
As a % of average net operating assets	%	28.8	33.4	32.2	34.3	32.3
Net income		7 024	7 210	6 659	6 010	5 208
Change relative to preceding year	%	-2.6	8.3	10.8	15.4	126.0
As a % of sales	%	21.9	20.1	20.5	19.0	16.7
As a % of average equity	%	17.8	19.5	19.4	20.7	20.7
Cash flow from operating activities		7 342	7 612	6 893	5 853	4 565
Change relative to preceding year	%	-3.5	10.4	17.8	28.2	-3.7
As a % of sales	%	22.9	21.3	21.2	18.5	14.6
Free cash flow		4 073	4 525	3 525	2 623	1 224
Change relative to preceding year	%	-10.0	28.4	34.4	114.3	-11.0
As a % of sales	%	12.7	12.6	10.9	8.3	3.9
Investment in tangible fixed assets		1 351	1 353	1 371	1 577	1 568
Change relative to preceding year	%	-0.1	-1.3	-13.1	0.6	-16.5
As a % of sales	%	4.2	3.8	4.2	5.0	5.0
Depreciation of tangible fixed assets		939	1 189	1 261	1 161	1 140

CHF millions unless indicated otherwise		2001	2000	1999	1998	1997
As a % of sales	%	2.9	3.3	3.9	3.7	3.7
Research & development expenditure		4 189	4 657	4 246	3 906	3 739
As a % of sales	%	13.1	13.0	13.1	12.3	12.0
Pharmaceuticals R&D expenditure		3 447	3 311	2 848	2 609	2 629
As a % of Pharmaceuticals sales	%	17.1	18.2	18.6	18.0	18.6
Total assets		66 785	58 196	65 527	56 225	53 650
Liquidity		21 844	20 523	22 601	19 678	18 486
Equity		42 245	36 862	37 216	31 396	26 801
Dividends of Novartis AG[1]		2 358	2 361	2 223	2 014	1 736
Debt/equity ratio		0.18:1	0.16:1	0.27:1	0.28:1	0.41:1
Current ratio		2.4:1	2.8:1	2.0:1	2.0:1	2.0:1
Net operating assets		28 071	22 479	24 759	20 826	19 528
Change relative to preceding year	%	24.9	-9.2	18.9	6.6	-10.5
As a % of sales	%	87.6	62.8	76.3	65.7	62.6
Personnel costs		7 358	7 813	7 184	7 093	7 298
As a % of sales	%	23.0	21.8	22.1	22.4	23.4
Number of employees at year end	number	71 116	67 653	81 854	82 449	87 239
Sales per employee	CHF	455 603	431 219	393 711	369 337	350 905

[1] 2001: Proposal to the shareholders' meeting

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Income Statements

(For the years ended December 31, 2001 and 2000)

	Notes	2001 CHF millions	2000 CHF millions
Sales	3/4	32 038	35 805
Cost of goods sold		-7 886	-10 242
Gross profit		24 152	25 563
Marketing & distribution		11 098	-10 945
Research & development	3	-4 189	-4 657
Administration & general overheads		-1 588	-2 078
Operating income	3/4	7 277	7 883
Income from associated companies	11	139	98
Financial income, net	5	1 067	1 091
Income before taxes and minority interests		8 483	9 072

	Notes	2001 CHF millions	2000 CHF millions
Taxes	6	1 440	-1 820
Income before minority interests		7 043	7 252
Minority interests		-19	-42
NET INCOME		**7 024**	7 210
Earnings per share (CHF)	7	2.73	2.75
Diluted earnings per share (CHF)	7	2.72	2.75

The accompanying notes form an integral part of the consolidated financial statements.

Consolidated Balance Sheets
(At December 31, 2001 and 2000)

	Notes	2001 CHF millions	2000 CHF millions
ASSETS			
Long-term assets			
Tangible fixed assets	8	9 060	9 030
Intangible assets	9	6 548	5 830
Investments in associated companies	11	6 715	1 531
Deferred taxes	12	3 235	3 265
Other financial assets	13	7 027	5 601
Total long-term assets		32 585	25 257
Current assets			
Inventories	14	4 112	4 122
Trade accounts receivable	15	5 349	5 283
Other current assets	16	2 895	3 011
Marketable securities	10	10 697	11 720
Cash and cash equivalents		11 147	8 803
Total currents assets		34 200	32 939
TOTAL ASSETS		**66 785**	58 196
EQUITY AND LIABILITIES			
Equity	17		
Share capital		1 443	1 443
Treasury shares		-169	-139
Reserves		40 971	35 558

	Notes	2001 CHF millions	2000 CHF millions
Total equity		42 245	36 862
Minority interests		104	78
Liabilities			
Long-term liabilities			
Financial debts	18	2 492	2 283
Deferred taxes	12	3 885	3 488
Other long-term liabilities	19	3 830	3 845
Total long-term liabilities		10 207	9 616
Short-term liabilities			
Trade accounts payable		1 809	1 591
Financial debts	21	5 074	3 779
Other short-term liabilities	22	7 346	6 270
Total short-term liabilities		14 229	11 640
Total liabilities		24 436	21 256
TOTAL EQUITY AND LIABILITIES		**66 785**	58 196

The accompanying notes form an integral part of the consolidated financial statements.

Consolidated Cash Flow Statements
(For the years ended December 31, 2001 and 2000)

	Notes	2001 CHF millions	2000 CHF millions
Net income		7 024	7 210
Reversal of non-cash items			
Minority interests		19	42
Taxes		1 440	1 820
Depreciation, amortization and impairments on			
Tangible fixed assets		969	1 196
Intangible assets		780	309
Financial assets		31	
Income from associated companies		-139	98
Gains on disposal of tangible and intangible assets		-510	-1
Net financial income		-1 067	-1 091
Interest and other financial receipts		779	1 944
Interest and other financial payments		-391	-1 211
Taxes paid		-1 377	-2 176
Cash flow before working capital and provision changes		7 558	7 944

	Notes	2001 CHF millions	2000 CHF millions
Restructuring payments and other cash payments out of provisions		-421	-439
Change in net current assets and other operating cash flow items	23	205	107
Cash flow from operating activities		7 342	7 612
Investment in tangible fixed assets		-1 351	-1 353
Proceeds from disposals of tangible fixed assets		275	347
Purchase of intangible and financial assets		-7 552	-3 149
Proceeds from disposals of intangible and financial assets		1 550	471
Acquisition/divestment of subsidiaries	24	-169	-1 371
Acquisition of minorities		-1	
Proceeds from disposals of marketable securities		2 573	4 839
Cash flow used for investing activities		-4 675	-216
Acquisition of treasury shares		-3 848	-1 165
Proceeds from issue of options on Novartis shares		4 056	
Change in long-term financial debts		1 258	-124
Change in short-term financial debts		374	1 402
Dividends paid		-2 194	-2 064
Cash flow used for financing activities		-354	-4 755
Net effect of currency translation on cash and cash equivalents		31	-119
Net change in cash and cash equivalents		2 344	2 522
Cash and cash equivalents at the beginning of the year		8 803	6 281
Cash and cash equivalents at end of the year		**11 147**	8 803

The accompanying notes form an integral part of the consolidated financial statements.

Consolidated Statement of Changes in Equity
(For the years ended December 31, 2001 and 2000)

CHF millions	Notes	Share premium	Retained earnings	Cumulative translation difference	Fair value of deferred cash flow hedges	Total reserves	Share capital	Treasury shares	Total equity
January 1, 2000		2 475	33 455	-27		35 903	1 443	-130	37 216
Dividends to third parties	25a		2 064			-2 064			-2 064
Transfer of share premium	25b	-2 186	2 186						
Acquisition of treasury shares			-1 156			-1 156		-9	-1 165
Effect of Agribusiness spin-off	25c		-3 655	-109		-3 764			-3 764
Translation effects	25d			-571		-571			-571
Net income			7 210			7 210			7 210

CHF millions	Notes	Share premium	Retained earnings	Cumulative translation difference	Fair value of deferred cash flow hedges	Total reserves	Share capital	Treasury shares	Total equity
December 31, 2000		289	35 976	-707		35 558	1 443	-139	36 862
Fair value adjustments on financial instruments	25e		1 054		-20	1 034			1 034
Dividends to third parties	25a		-2 194			-2 194			-2 194
Acquisition of treasury shares	25f		-3 825			-3 825		-30	-3 855
Issue of call options on Novartis shares	25g	3 102				3 102			3 102
Issue of put options on Novartis shares	25h	909				909			909
Translation effects	25d			637		-637			-637
Net income			7 024			7 024			7 024
December 31, 2001		**4 300**	**38 035**	**-1 344**	**-20**	**40 971**	**1 443**	**-169**	**42 245**

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 are prepared in accordance with the historical cost convention and comply with the standards formulated by the International Accounting Standards Board (IASB) and its predecessor organization the International Accounting Standards Committee (IASC) and the following significant accounting policies.

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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.

Changes in accounting policies: IASB and IASC have issued a number of new standards in recent years. The significant new standard IAS 39 *"Financial Instruments: Recognition and Measurement"* was adopted by the Group from January 1, 2001. This involved the recording in the balance sheet of unrealized gains on available-for-sale marketable securities and derivative portfolios.

Scope of consolidation: The financial statements include all companies which Novartis AG, Basel, 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 its activities. As permitted by IAS, equity compensation and post-employment plans are not consolidated.

Investments in associated companies, (generally investments of between 20% and 50% in a company's voting shares) and joint ventures are accounted for by using the equity method. All other minority investments are valued at their acquisition cost less any impairment in value.

Principles of consolidation: The annual closing date of the individual financial statements is December 31. The financial statements of consolidated companies operating in highly inflationary economies are adjusted to eliminate the impact of high inflation.

The purchase method of accounting is used for acquired businesses. 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.

The Group 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 transaction was structured as a merger of equals based on an exchange of shares, providing former Sandoz AG shareholders with 55% and former Ciba-Geigy AG shareholders with 45% of the new company. The uniting of interests method was used for this transaction. The merger was consummated before the effective date of Interpretation 9 of the Standing Interpretations Committee on accounting for business combinations; if it were undertaken today, it might require a different accounting treatment.

Significant intercompany income and expenses, including unrealized gross profits from internal Novartis transactions and intercompany receivables and payables have been eliminated.

Revenue and expense recognition: Sales are recognized on delivery or on providing services to third parties and are reported net of sales taxes and rebates. Provisions for rebates to customers are recognized in the same period that the related sales are recorded, based on the contract terms. Expenses of research and service contracts in progress are recognized based on their percentage of completion.

Foreign currencies: The consolidated financial statements of Novartis are expressed in Swiss francs ("CHF" or "Swiss francs"). The local currency has primarily been used as the reporting currency throughout the world.

The Group accounts for foreign currency in accordance with IAS 21 (revised) and IAS 29.

In the respective subsidiary 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 subsidiary's income statement.

Income, expense and cash flows of the consolidated companies have been translated into Swiss francs using average exchange rates. The 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 internal financing and net income are allocated to reserves.

Derivative financial instruments and hedging: The Group adopted IAS 39 - *Financial Instruments: Recognition and Measurement* from January 1, 2001. Under IAS 39 derivative financial instruments are initally recognized in the balance sheet at cost and subsequently remeasured to their fair value. The method of recognizing the resulting gain or loss is dependent on whether the derivative contract is designed to hedge a specific risk and qualifies for hedge accounting. On the date a derivative contract is entered into, the Group designates certain derivatives 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 (cash flow hedge) or firm commitment 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. Changes in the fair value of derivatives in cash flow hedges are recognized in equity. Where the forecasted transaction or firm commitment results in the recognition of an asset or liability, the gains and losses previously included in equity are included in the initial measurement of the asset or liability. Otherwise, amounts recorded in equity 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 with foreign currency borrowings. All foreign exchange gains or losses arising on translation are recognized in equity and included in cumulative translation differences.

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 hedge accounting under IAS 39 are recognized immediately in the income statement.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and 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 equity is immediately transferred to the income statement.

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.

The Group's previous policy on accounting for derivative instruments not considered to be hedges was to value these at the lower of cost on inception and fair value on a portfolio basis. A net unrealized loss was included in the current year's result. A net unrealized gain was not recorded.

The Group's previous policy on accounting for derivative financial instruments considered to be hedges was very similar to IAS 39 requirements although the conditions for hedge effectiveness were less strict.

Tangible fixed assets: Tangible fixed assets have been valued at cost of acquisition or production cost and depreciated on a straight-line basis to the income statement, over the following estimated useful lives:

Buildings	20 to 40 years
Machinery and equipment	10 to 20 years
Furniture and vehicles	5 to 10 years
Computer hardware	3 to 7 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 upfront payments to lease land on which certain of the Group's buildings are located. Additional costs which extend the useful life of the tangible fixed assets are capitalized. Financing costs associated with the construction of tangible fixed assets are not capitalized. Tangible fixed assets which are financed by leases giving rights to use the assets as if owned are capitalized at their estimated cost at the inception of the lease, and depreciated in the same manner as other tangible fixed assets.

Long lived assets, including identifiable intangibles and goodwill, are reviewed for impairment whenever events or changes in circumstance indicate that the carrying amount of the asset may not be recoverable. When such events or changes in circumstance indicate the asset may not be recoverable, the Group estimates the future cash flows expected to result from the use of the asset and its eventual disposition. If the sum of such expected discounted future cash flows is less than the carrying amount of the asset, an impairment loss is recognized for the amount by which the asset's net book value exceeds its fair market value. For purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Fair value can be based on sales of similar assets, or other estimates of fair value such as discounting estimated future cash flows. Considerable management judgment is necessary to estimate discounted future cash flows. Accordingly, actual outcomes could vary significantly from such estimates.

Intangible assets: These are valued at their cost and reviewed periodically and adjusted for any diminution in value as noted in the preceding paragraph. Any resulting impairment loss is recorded in the income statement in general overheads. In the case of 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. Goodwill, which is denominated in the local currency of the related acquisition, is amortized to income through administration and general overheads on a straight-line basis over its useful life. The amortization period is determined at the time of the acquisition, based upon the particular circumstances, and ranges from 5 to 20 years. Goodwill relating to acquisitions arising prior to January 1, 1995 has been fully written off against reserves.

Management determines the estimated useful life of goodwill based on its evaluation of the respective companies at the time of the acquisition, considering factors such as existing market share, potential sales growth and other factors inherent in the acquired companies.

Other acquired intangible assets are written off on a straight-line basis over the following periods:

Trademarks	10 to 15 years
Product and marketing rights	5 to 20 years
Software	3 years
Others	3 to 5 years

Trademarks are amortized on a straight-line basis over their estimated economic or legal life, whichever is shorter, while the history of the Group has been to amortize product rights over estimated useful lives of 5 to 20 years. 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. Marketing rights are amortized over their useful lives commencing in the year in which the rights are first utilized.

Financial assets: Associated companies and joint ventures are accounted for by the equity method. Since January 1, 2001, all other minority investments and loans are initially recorded at cost and subsequently carried at fair value. Exchange rate gains and losses on loans are recorded in the income statement. All other changes in the fair value of financial assets are deferred as a fair value adjustment in equity and recycled to the income statement when the asset is sold. Adjustments are made for other than temporary impairments in value.

Under the Group's previous accounting policy, all minority investments were carried at their acquisition cost and loans at their nominal value.

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 primarily valued at standard cost, which approximates to 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. Unsale-able inventory is fully written off.

Trade accounts receivable: The reported values represent the invoiced amounts, less adjustments for doubtful receivables.

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.

Marketable securities: Marketable securities consist of equity and debt securities which are traded in liquid markets. In anticipation of the introduction of IAS 39, since December 31, 2000, 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. Since January 1, 2001, marketable securities are initially recorded at cost and subsequently carried at fair value. Exchange rate gains and losses on bonds are recorded in the income statement. All other changes in the fair value of unhedged securities are deferred as a fair value adjustment in equity and recycled to the income statement when the asset is sold or impaired. 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 marketable securities which are considered to be other than temporary are included in financial income, net in the income statement.

Under the Group's previous accounting policy, marketable securities were carried at the lower of cost or market and unrealized losses were included as financial income, net in the income statement.

Repurchase agreements: The underlying securities are included within marketable securities. The repurchase agreements for the securities sold and agreed to be repurchased under the agreement, are recognized gross and included in cash and cash equivalents and short-term financial debts. Income and expenses are recorded in interest income and expense, respectively.

Taxes: Taxes on income are accrued in the same periods as the revenues and expenses to which they relate. Deferred taxes have been calculated using the comprehensive liability method. They are calculated on the temporary differences that arise between the tax base of an asset or liability and its carrying value in the balance sheet of Group companies prepared for consolidation purposes, except for those differences related to investments in subsidiaries where their reversal will not take place in the foreseeable future. Furthermore, withholding or other taxes on eventual distribution of retained earnings of Group companies are only taken into account where a dividend has been planned since generally the retained earnings are reinvested.

Deferred tax assets or liabilities, calculated using applicable subsidiary tax rates, are included in the consolidated balance sheet as either a long-term asset or liability, with changes in the year recorded in the income statement. Deferred tax assets are fully recognized and reduced by a valuation allowance only if it is probable that a benefit will not be realized in the future.

Pension fund, post-employment benefits, other long-term employee benefits and employee share participation plans:

a) Defined benefit pension plans

The liability in respect to defined benefit pension plans is in all material cases 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 less employee contributions, is included in the personnel expenses of the various functions where the employees are located. Plan assets are recorded at their fair values. Significant gains or losses arising from experience adjustments, changes in actuarial assumptions, and amendments to pension plans are charged or credited to income over the service lives of the related employees.

b) Post-employment benefits other than pensions

Certain subsidiaries provide healthcare and insurance benefits for a portion of their retired employees and their eligible dependents. The cost of these benefits is actuarially determined and included in the related function expenses over the em-ployees' working lives. The related liability is included in long-term liabilities.

c) Other long-term employee benefits

Other long-term employee benefits represent amounts due to employees under deferred compensation arrangements mandated by certain jurisdictions in which the Group conducts its operations. Benefits cost is recognized on an accrual basis in the personnel expenses of the various functions where the employees are located. The related obligation is accrued in other long-term liabilities.

d) Employee share participation plans

No compensation cost is recognized in these financial statements for options or shares granted to employees from employee share participation plans.

Research and development: Research and development expenses are fully charged to the income statement. The Group considers that regulatory and other uncertainties inherent in the development of its key new products preclude it from capitalizing development costs. Acquired projects which have achieved technical feasibility, usually signified by US Food & Drug Administration or comparable regulatory body approval, are capitalized because it is probable that the costs will give rise to future economic benefits. Laboratory buildings and equipment included in tangible fixed assets are depreciated over their estimated useful lives.

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 for.

Restructuring charges: Restructuring charges are accrued against operating income in the period in which management has committed to a plan and it is probable a liability has been incurred and the amount can be reasonably estimated. Restructuring charges or releases are included in general overheads. Releases of accrued amounts are recognized in the period in which it is decided that the amounts will not be required.

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 estimated. Cost of future expenditures do not reflect any claims or recoveries. The Group records recoveries at such time the amount is reasonably estimable and collection is probable. With regard to recurring remediation costs, the discounted amount of such annual costs for the next 30 years are calculated and recorded in long-term liabilities.

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 and share split: Treasury shares are deducted from equity at their nominal value of CHF 0.50 per share. Prior to the share split which became effective on May7, 2001, the nominal value was CHF 20.00 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of, treasury shares are recorded in consolidated equity. Except where indicated, all share related data has been restated to reflect the effect of the share split.

2. Changes in the scope of consolidation

The following significant changes were made during 2001 and 2000:

Acquisitions 2001

Generics: In January, 2001, the sector acquired the generic business line in the USA of Apothecon Inc., the generic arm of Bristol-Myers Squibb, for CHF 66 million in cash. No financial debts were acquired. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 51 million which is being amortized on a straight-line basis over 15 years.

In January, 2001, the sector acquired the generic business in six European countries from BASF AG, Germany for CHF 119 million in cash and the assumption of CHF 53 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 121 million which is being amortized on a straight-line basis over 20 years.

In April, 2001, the sector acquired 100% of Labinca SA, Buenos Aires, Argentina for CHF 118 million in cash and the assumption of CHF 14 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 95 million which is being amortized on a straight-line basis over 20 years.

In April, 2001, the sector acquired 100% of Lagap Pharmaceuticals Ltd., UK, from Adcock Ingram Ltd. for CHF 32 million in cash and the assumption of CHF 33 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 53 million which is being amortized on a straight-line basis over 20 years.

Corporate: During the first half of 2001, the Group acquired 21.3% of the voting shares of Roche Holding AG for CHF 5.2 billion. This represents approximately 4% of the total shares and equity securities of Roche Holding AG and is accounted for using the equity method of accounting. The related goodwill was CHF 1 246 million which is being amortized on a straight-line basis over 20 years.

Acquisitions 2000

Generics: On April 10, 2000, the sector acquired 72% of Grandis Biotech GmbH, Freiburg, Germany for CHF 26 million in cash. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 32 million which is being amortized on a straight-line basis over 15 years.

CIBA Vision: On October 2, 2000 the sector acquired 100% of Wesley Jessen VisionCare Inc., Des Plaines, Illinois, USA for CHF 1.3 billion (USD 0.8 billion) in cash.

The net assets acquired consisted of tangible fixed assets (CHF 177 million), inventories (CHF 182 million), trade accounts receivable (CHF 93 million), deferred tax assets (CHF 56 million), other assets (CHF 118 million), deferred tax liabilities (CHF 241 million), short term financial debts (CHF 155 million) and other liabilities (CHF 330 million). The acquisition was accounted for under the purchase method of accounting and the related goodwill and intangible assets were CHF 1.4 billion which are being amortized on a straight-line basis over 20 years.

Animal Health: In January 2000, Novartis Animal Health completed the 100% acquisition of Vericore Ltd., a UK-based company focussed on vaccines, parasiticides and other products for farm animals, pharmaceuticals for companion animals, and aquaculture. The acquisition price amounted to CHF 96 million and was paid in cash.

In June 2000, Novartis Animal Health increased the 40% stake in the Canadian based aquaculture company Cobequid Life Sciences Inc., which had been obtained in the Vericore acquisition, to 100% for CHF 38 million in cash.

These acquisitions were accounted for under the purchase method of accounting and the related goodwill was CHF 163 million which is being amortized on a straight-line basis over 15 years.

Divestments 2000

Agribusiness sector: Novartis spun-off its Agribusiness sector on November 6, 2000 to its shareholders as part of the transactions necessary to form Syngenta AG. On the same day AstraZeneca Plc. also spun-off its Crop Protection activities which were then merged with Novartis Agribusiness. On spinoff, Novartis AG shareholders owned 61% of the new company and AstraZeneca shareholders 39%. Syngenta AG was listed on the Swiss, New York, London and Stockholm exchanges on November 13, 2000.

The sales and operating income recorded by Novartis Agribusiness up to the spin-off date were CHF 6.7 billion and CHF 1.2 billion respectively. This transaction involved the Group transferring CHF

3.3 billion of debt to Syngenta. The Group's equity has been reduced by a net CHF 3.8 billion (after taking into account a receipt from Novartis shareholders of CHF 687 million in connection with this transaction) due to this spin-off to its shareholders. Novartis incurred costs in relation to this transaction of CHF 69 million.

3. Sectorial breakdown of key figures 2001 and 2000

Novartis is organized on a worldwide basis into five continuing operating sectors and Corporate activities. Agribusiness is presented as a discontinued sector. These sectors, which are based on internal management accounts, are as follows:

Continuing sectors: The Pharmaceuticals sector manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular, metabolism and endocrinology; central nervous system; dermatology; oncology and hematology; ophthalmics; respiratory; rheumatology; bone and hormone replacement therapy; transplantation.

The Generics sector manufactures, distributes and sells off-patent pharmaceutical products and substances.

The Consumer Health sector manufactures, distributes and sells health and medical nutrition products and a variety of over-the-counter (OTC) medicines.

The CIBA Vision sector manufactures, distributes and sells contact lenses, lens care products, and ophthalmic surgical products.

The Animal Health sector manufactures, distributes and sells veterinary products for farm and companion animals.

Corporate: This includes 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 directly attributable to specific sectors. Usually, no allocation of Corporate items is made to the continuing sectors although there are charges made by Corporate for share and share option programs and certain pension plans and in 2000 there was an allocation of CHF 60 million of Corporate overheads to the discontinued Agribusiness sector.

Discontinued sector: The Agribusiness sector principally manufactured, distributed and sold insecticides, herbicides and fungicides and sold seeds for growing corn, sugarbeet, oilseeds, vegetables and flowers.

The Group's sectors are businesses that offer different products. These sectors are managed separately because they manufacture, distribute, and sell distinct products which require differing technologies and marketing strategies.

Revenues on intersector sales are determined on an arm's length basis. The accounting policies of the sectors described above are the same as those described in the summary of accounting policies except that sectors receive a Corporate charge for share and share option programs which have no net cost in the Group's IAS consolidated financial statements. The Group principally evaluates sector performance and allocates resources based on operating income.

Net sector operating assets consist primarily of tangible fixed assets, intangible assets, inventories and receivables less operating liabilities. Corporate assets and liabilities principally consist of net liquidity (cash, cash equivalents, marketable securities less financial debts), investments in associated companies and deferred and current taxes.

(In CHF Millions Except Employees)	Pharmaceuticals		Generics		Consumer Health		CIBA Vision		Animal Health		Corporate		Total Continuing Sectors		Discontinued Agribusiness Sector		Group	
	2001	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**	**2001**	**2000**
Sales to third parties	20 181	18 150	2 433	1 973	6 675	6 514	1 787	1 392	962	1 083			32 038	29 112		6 693	32 038	35 805
Sales to other sectors	230	245	203	170	29	42	17	8	15		-494	-465						
Sales of sectors	**20 411**	18 395	**2 636**	2 143	**6 704**	6 556	**1 804**	1 400	**977**	1 083	**-494**	-465	**32 038**	29 112		6 693	**32 038**	35 805
Operating income	5 677	5 401	281	242	920	869	174	100	138	179	87	-64	7 277	6 727		1 156	7 277	7 883
Income from associated companies	190	104	2	1	-14	-7		-1			-39		139	97		1	139	98
Financial income, net													1 067	1 216		-125	1 067	1 091
Income before taxes and minority interests													8 483	8 040		1 032	8 483	9 072
Taxes													-1 440	-1 504		-316	-1 440	-1 820
Income before minority interests													7 043	6 536		716	7 043	7 252
Minority interests													-19	-25		-17	-19	-42
Net income													**7 024**	6 511		699	**7 024**	7 210
Included in operating income are:																		
Research and development	-3 447	-3 311	-169	-170	-181	-186	-98	-67	-93	-88	-201	-189	-4 189	-4 011		-646	-4 189	-4 657
Depreciation of tangible fixed assets	-578	-622	-126	-115	-105	-101	-96	-86	-14	-12	-20	-32	-939	-968		-221	-939	-1 189
Amortization of intangible assets	-306	-62	-87	-58	-45	-38	-102	-32	-15	-12	-9	-3	-564	-205		-104	-564	-309
Impairment charges on tangible and intangible assets	-242	-2			-4								-246	-2		-5	-246	-7
Restructuring charges		-42		-16	-21	-2		-41					-21	-101			-21	-101
Total assets	**18 631**	16 887	**3 362**	2 575	**4 686**	4 426	**2 909**	3 169	**735**	842	**36 462**	30 297	**66 785**	58 196			**66 785**	58 196
Liabilities	-5 487	-4 477	-740	-636	-2 158	-2 142	-599	-824	-163	-198	-15 289	-12 979	-24 436	-21 256			-24 436	-21 256
Total equity and minority interests	**13 144**	12 410	**2 622**	1 939	**2 528**	2 284	**2 310**	2 345	**572**	644	**21 173**	17 318	**42 349**	36 940			**42 349**	36 940

	Pharmaceuticals		Generics		Consumer Health		CIBA Vision		Animal Health		Corporate		Total Continuing Sectors		Discontinued Agribusiness Sector		Group	
Less net liquidity											-14 278	-14 461	-14 278	-14 461			-14 278	-14 461
Net operating assets	**13 144**	12 410	**2 622**	1 939	**2 528**	2 284	**2 310**	2 345	**572**	644	**6 895**	2 857	**28 071**	22 479			**28 071**	22 479
Included in total assets are:																		
Total tangible fixed assets	**5 897**	5 770	**1 081**	974	**893**	880	**579**	648	**73**	72	**537**	686	**9 060**	9 030			**9 060**	9 030
Additions to tangible fixed assets	617	534	209	241	129	122	153	120	19	20	224	142	1 351	1 179	174		1 351	1 353
Total investments in associated companies	**1 554**	1 375	**7**	5		2		5			**5 154**	144	**6 715**	1 531			**6 715**	1 531
Employees at year end	**41 256**	38 397	**7 230**	5 712	**12 824**	12 949	**6 797**	7 644	**1 997**	1 975	**1 012**	976	**71 116**	67 653			**71 116**	67 653

2000 sector reporting has been restated to reflect the transfer as of January 1, 2001 of the Ophthalmics business from CIBA Vision to the Pharmaceuticals sector and the switch of certain products between sectors.

4. Regional breakdown of key figures 2001 and 2000

(in CHF millions except employees)

	Europe	The Americas	Asia/Africa Australia	Total
2001				
Sales[1]	10 158	16 640	5 240	**32 028**
Operating income[2]	4 555	2 158	564	**7 277**
Depreciation of tangible fixed assets included in operating income	561	311	67	**939**
Net operating assets[3]	15 759	10 590	1 722	**28 071**
Additions to tangible fixed assets included in net operating assets	560	723	68	**1 351**
Personnel costs	3 127	3 527	704	**7 358**
Employees at year end	31 386	27 303	12 427	**71 116**

	Europe	The Americas	Asia/Africa Australia	Total
2000				
Sales[1]	11 729	17 761	6 315	35 805
Operating income[2]	4 469	2 474	940	7 883

	Europe	The Americas	Asia/Africa Australia	Total
Depreciation of tangible fixed assets included in operating income	715	388	86	1 189
Net operating assets[3]	11 176	9 774	1 529	22 479
Additions to tangible fixed assets included in net operating assets	790	475	88	1 353
Personnel costs	3 703	3 282	828	7 813
Employees at year end	28 815	27 063	11 775	67 653

The following countries accounted for more than 5% of the respective Group totals as at, or for the years ended, December 31, 2001 and 2000:

	Sales[1]				Investment in tangible fixed assets						Net operating assets[3]	
Country	**2001**	**%**	**2000**	**%**	**2001**	**%**	**2000**	**%**	**2001**	**%**	**2000**	**%**
Switzerland	499	2	624	2	160	12	270	20	10 548	37	3 782	17
USA	13 798	43	13 859	39	655	48	389	29	9 228	33	8 540	38
Japan	2 560	8	2 891	8	14	1	17	1	990	4	891	4
Germany	1 978	6	2 208	6	54	4	110	8	196	1	292	1
France	1 617	5	2 009	5	79	6	90	7	928	3	436	2
Austria	268	1	277	1	107	8	94	7	805	3	604	3
Other	11 318	35	13 937	39	282	21	383	28	5 376	19	7 934	35
Total Group	**32 038**	100	35 805	100	**1 351**	**100**	1 353	100	**28 071**	**100**	22 479	100

1 Sales by location of third party customer.

2 Operating income as recorded in the legal entities in the respective region.

3 Long-term and current assets (excluding marketable securities, cash and fixed-term deposits) less non-interest bearing liabilities.

No single customer accounts for 10% or more of the Group's total sales.

5. Financial income, net

	2001 CHF millions	2000 CHF millions
Interest income	639	1 052
Dividend income	42	91
Capital gains	1 143	784
Income on options and forward contracts	1 588	804
Other financial income		5

	2001 CHF millions	2000 CHF millions
Financial income	3 412	2 736
Interest expense	-367	-510
Expenses on options and forward contracts	-1 713	-1 334
Other financial expense	-147	-130
Financial expense	-2 227	-1 974
Currency result, net	-118	329
Total financial income, net	**1 067**	1 091

2001 interest income includes a total of CHF 32 million (2000: CHF 14 million) received from the foundations referred to in note 28, at commercial interest rates on the outstanding short-term debt.

6. Taxes

Income before taxes and minority interests consists of the following:

	2001 CHF millions	2000 CHF millions
Switzerland	3 372	2 482
Foreign	5 111	6 590
Total income before taxes and minority interests	**8 483**	9 072

Current and deferred income tax expense consists of the following:

	2001 CHF millions	2000 CHF millions
Switzerland	-271	-351
Foreign	-1 005	-1 571
Total current income tax expense	**-1 276**	-1 922
Switzerland	-281	-83
Foreign	175	185
Total deferred tax (expense)/income	-106	102
Share of tax of associated companies	-58	
Total income tax expense	**-1 440**	-1 820

	2001 CHF millions	2000 CHF millions
Temporary differences on which no deferred tax has been provided as they are permanent in nature:		
write-down of investments in subsidiaries	1 635	1 340
goodwill from acquisitions	1 230	1 342

The gross value of net operating loss carry forwards with their expiry dates is as follows:

	2001 CHF millions	2000 CHF millions
one year	30	22
two years	26	74
three years	75	21
four years	36	51
five years	35	80
more than five years	565	587
Total	**767**	835

Of these gross values CHF 535 million has been capitalized as a deferred tax asset (2000: CHF 411 million).

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 result before tax of each subsidiary) and the effective tax rate are:

	2001 %	2000 %
Expected tax rate	17.7	19.5
Effect of disallowed expenditures	3.1	1.5
Effect of utilization of tax losses brought forward from prior periods	-0.3	-0.3
Effect of income taxed at reduced rates	-1.6	-1.9
Prior year and other items	-1.9	1.3
Effective tax rate	**17.0**	20.1

The utilization of tax loss carryforwards lowered the tax charge by CHF 22 million and CHF 26 million in 2001 and 2000, respectively.

7. Earnings per share (EPS)

Basic earnings per share is calculated by dividing the net income attributable to shareholders 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.

	2001	2000
Net income attributable to shareholders (CHF millions)	7 024	7 210
Weighted average number of shares outstanding	2 571 673 365	2 613 547 597
Basic earnings per share (expressed in CHF)	**2.73**	2.75

For the diluted earnings per share the weighted average number of shares outstanding is adjusted to assume conversion of all potential dilutive shares. The Group's convertible debt represents a potential dilution in the earnings per share to the extent that it is not covered by a hedge with non-consolidated employee share participation and employee benefit foundations to deliver the required number of shares on conversion.

The diluted EPS calculation takes into account all potential dilutions to the earnings per share arising from the convertible debt and call options on Novartis shares. Net income is adjusted to eliminate the applicable convertible debt interest expense less the tax effect.

	2001	2000
Net income attributable to shareholders (CHF millions)	7 024	7 210
Elimination of interest expense on convertible debt (net of tax effect)	3	2
Net income used to determine diluted earnings per share	7 027	7 212
Weighted average number of shares outstanding	2 571 673 365	2 613 547 597
Adjustment for assumed conversion of convertible debt	1 507 027	1 608 676
Call options on Novartis shares	4 574 401	
Adjustment for dilutive stock options	1 010 963	982 560
Weighted average number of shares for diluted earnings per share	2 578 765 756	2 616 138 833
Diluted earnings per share (expressed in CHF)	**2.72**	2.75

8. Tangible fixed asset movements

	Land CHF millions	Buildings CHF millions	Machinery CHF millions	Plant under construction and other equipment CHF millions	2001 CHF millions	2000 CHF millions
Cost						
January 1	385	6 346	9 645	1 175	17 551	23 013
Consolidation changes	3	-12	-46	8	-47	227
Additions	15	367	943	26	1 351	1 353
Disposals	-20	-168	-583	-18	-789	-1 352
Effect of Agribusiness spin-off						-5 636
Translation effects	-6	-70	-79	-42	-197	-54
December 31	377	6 463	9 880	1 149	17 869	17 551
Accumulated depreciation						
January 1		-3 072	-5 449		-8 521	-11 347
Consolidation changes		19	55		74	-26
Depreciation charge		-199	-740		-939	-1 189
Depreciation on disposals		90	396		486	900
Effect of Agribusiness spin-off						3 145
Translation effects		77	44		121	3
December 31		-3 085	-5 694		-8 779	-8 514
Impairment charge	-1	-8	-21		-30	-7

	Land CHF millions	Buildings CHF millions	Machinery CHF millions	Plant under construction and other equipment CHF millions	2001 CHF millions	2000 CHF millions
Net book value December 31	376	3 370	4 165	1 149	**9 060**	9 030
Insured value December 31					21 060	21 329
Net book value of tangible fixed assets under finance lease contracts					13	17

At December 31, 2001 commitments for purchases of tangible fixed assets totaled CHF 309 million (2000: CHF 248 million).

9. Intangible asset movements

	Goodwill CHF millions	Product and marketing rights CHF millions	Trademarks CHF millions	Software CHF millions	Other intangibles CHF millions	2001 CHF millions	2000 CHF millions
Cost							
January 1	2 379	3 256	547	55	271	6 508	3 981
Additions	331	928	71	38	80	1 448	4 449
Disposals	-8	-5	-8	-6	-15	-42	-8
Effect of Agribusiness spin-off							-1 910
Translation effects	34	43	4	-2	-3	76	-4
December 31	2 736	4 222	614	85	333	7 990	6 508
Accumulated amortization							
January 1	-311	-91	-80	-41	-155	-678	-767
Amortization charge	-136	-252	-54	-27	-95	-564	-309
Disposals	1	1	3	4	20	29	8
Effect of Agribusiness spin-off							402
Translation effects	4	-19	-1	2	1	-13	-12
December 31	-442	-361	-132	-62	-229	-1 226	-678
Impairment charge		-216				-216	

	Goodwill CHF millions	Product and marketing rights CHF millions	Trademarks CHF millions	Software CHF millions	Other intangibles CHF millions	2001 CHF millions	2000 CHF millions
Net book value December 31	2 294	3 645	482	23	104	**6 548**	5 830

Principal additions in 2001 are pitavastatin marketing rights (2000: Famvir) and in both years goodwill on acquisitions.

10. Marketable securities and derivative financial instruments

Market risk

The Group is exposed to market risk, primarily related to foreign exchange, interest rates and market value of the investment of liquid funds. Management 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 is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in interest rates, foreign currency rates and market rates of investment 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. The Group does not enter any financial transaction containing a risk that cannot be quantified at the time the transaction is concluded; i.e. 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 hedges transactions and future transactions (in the case of anticipatory hedges) it knows it will have in the future based on past experience. In the case of liquid

funds it writes options on assets it has, or on positions it wants to acquire, and for which it has the required liquidity.

The Group therefore expects that any loss in value for these instruments generally would be offset by increases in the value of the hedged transactions.

a) Foreign exchange rates: The Group uses the CHF as its reporting currency and is therefore exposed to foreign exchange movements, primarily in US, European, Japanese, other Asian and Latin American currencies. Consequently, it enters into various contracts which change in value as foreign exchange rates change, to preserve the value of assets, commitments and anticipated transactions. The Group uses forward contracts and foreign currency option contracts to hedge certain anticipated foreign currency revenues and the net investment in certain foreign subsidiaries.

b) Commodities: 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 that margin and is thus below materiality levels. Accordingly, the Group does not enter into commodity future, forward and option contracts to manage fluctuations in prices of anticipated purchases.

c) Interest rates: The Group manages its exposure to interest rate risk by changing the proportion of fixed rate debt and variable rate debt in its total debt portfolio. To manage this mix the Group may enter into interest rate swap agreements, in which it exchanges the periodic payments, based on a notional amount and agreed upon fixed and variable interest rates.

Use of the above-mentioned derivative financial instruments has not had a material impact on the Group's financial position at December 31, 2001 and 2000 or the Group's results of operations for the years ended December 31, 2001 and 2000.

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.

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.

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, 2001 and 2000. 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 the markets or standard pricing models at December 31, 2001 and 2000.

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Currency related instruments						
Forward foreign exchange rate contracts	7 114	8 191	94	355	-214	-5
Over the counter currency options	13 259	13 815	90	119	-157	-155
Cross currency swaps	1 332				-33	
Total of currency related instruments	**21 705**	22 006	**184**	474	**-404**	-160
Interest rate related instruments						
Interest rate swaps	3 700	2 854	29	21	-5	-30
Forward rate agreements	6 450	2 950		1	-17	-6
Interest rate options	150	300			-4	-2
Total of interest rate related instruments	**10 300**	6 104	**29**	22	**-26**	-38
Options on equity securities	12 018	10 386	79	503	-539	-528
Total derivative financial instruments	**44 023**	38 496	**292**	999	**-969**	-726

The contract or underlying principal amount of derivative financial instruments at December 31, 2001 and 2000 are set forth by currency in the table below.

	CHF CHF millions	EUR CHF millions	USD CHF millions	JPY CHF millions	Other currencies CHF millions	Total 2001 CHF millions	Total 2000 CHF millions
Forward foreign exchange rate contracts			6 667	383	64	7 114	8 191

	CHF CHF millions	EUR CHF millions	USD CHF millions	JPY CHF millions	Other currencies CHF millions	Total 2001 CHF millions	Total 2000 CHF millions
Over the counter currency options		6 513	3 862	1 813	1 071	13 259	13 815
Cross currency swaps		1 332				1 332	
Currency related derivatives		7 845	10 529	2 196	1 135	**21 705**	22 006
Interest rate swaps	3 700					3 700	2 854
Forward rate agreements	6 450					6 450	2 950
Interest rate options	150					150	300
Interest rate related derivatives	10 300					**10 300**	6 104
Options on equity securities	8 383	153	3 469		13	12 018	10 386
Total derivative financial instruments	18 683	7 998	13 998	2 196	1 148	**44 023**	38 496

Derivative financial instruments effective for hedge accounting purposes

	Contract or underlying principal amount		Fair values	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Anticipated transaction hedges				
Forward foreign exchange rate contracts	2 381	2 306	83	115
Over the counter currency options	4 661	777	66	23
Total of anticipated transaction hedges	**7 042**	3 083	**149**	138
Net investment in foreign subsidiary hedges				
Forward foreign exchange rate contracts	2 720	2 540	-133	128
Total of net investment in foreign subsidiary hedges	**2 720**	2 540	**-133**	128
Available-for-sale security hedges				
Options on securities	2 611	4 087	-125	-266
Total of available-for-sale security hedges	**2 611**	4 087	**-125**	-266
Total of derivative financial instruments effective for hedge accounting purposes	**12 373**	9 710	**-109**	

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 2002.

Marketable securities and time deposits

	Balance sheet value		Unrealized and unrecognized gains		Market value	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Available-for-sale marketable securities						
Equity securities	3 448	3 364		1 157	3 448	4 521
Debt securities	4 560	6 118		185	4 560	6 303
Total available-for-sale marketable securities	**8 008**	9 482		1 342	**8 008**	10 824
Time deposits longer than 90 days	2 689	2 238			2 689	2 238
Total marketable securities and time deposits	**10 697**	11 720		1 342	**10 697**	13 062

Since the introduction of IAS 39 on January 1, 2001 all marketable securities are carried in the consolidated balance sheet at fair value. Under the Group's previous policy, marketable securities were carried at the lower of cost or market and unrealized gains were not recognized. During 2001, CHF 81 million of unrealized losses on available-for-sale marketable securities were considered to be other than temporary and were charged to the income statement.

11. Investment in associated companies

Novartis has the following significant investments in associated companies which are accounted for by using the equity method:

	Balance sheet value		Pre-tax income statement effect	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Roche Holding AG, Switzerland	5 150		-39	
Chiron Corporation, USA	1 544	1 360	185	97
Others	21	171	-7	1
Total	**6 715**	1 531	**139**	98

The Group's associated companies' accounting standards are adjusted to IAS in cases where IAS 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") and Chiron Corporation, adjustments may be necessary in succeeding years as more financial and other information becomes publicly available.

Roche Holding AG: The Group's holding in Roche acquired during 2001 is accounted for using the equity method as approximately 21.3% of the voting shares of the company are owned even though this represents only approximately 4% of the total outstanding voting and non-voting equity instruments. In order to apply this accounting treatment, independent appraisers have been used to estimate the fair value of Roche so as to determine the Novartis share of tangible and intangible assets and the amount of the residual goodwill. These calculations have been based on publicly available information.

The purchase price allocation is as follows:

	CHF millions
Net tangible assets	128
Identified intangible assets	3 803
Residual goodwill	1 246
Purchase price	5 177

The increase in value allocated to inventory has been expensed, based on its expected usage. 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 residual goodwill is also being amortized on a straight-line basis over 20 years.

The pre-tax income statement impact for 2001 is as follows:

	CHF millions
Depreciation and amortization of fair value adjustments to tangible and intangible assets and goodwill	-213
Novartis share of estimated 2001 Roche consolidated pre-tax income	174
Pre-tax income statement effect	-39

The market value of Novartis' interest in Roche at December 31, 2001 was CHF 4.6 billion.

Chiron Corporation: The recording of the results of the strategic interest in Chiron commenced on January 1, 1995. Its equity valuation is based on the Chiron equity at December 31 of each year (for 2000 and prior years there was a three month lag as the year to September 30 was used). The amounts for Chiron incorporated into the Novartis consolidated financial statements take into account the effects stemming from differences in accounting policies between Novartis and Chiron (primarily Novartis' amortization over 10 years of in-process technology arising on Chiron's acquisitions which are written off by Chiron in the year of acquisition). The difference between the equity interest in the underlying Chiron net assets as determined under US GAAP and the carrying value of Chiron is CHF 217 million and CHF 71 million as of December 31, 2001 and September 30, 2000, respectively, and primarily relates to different values or accounting treatment of goodwill and in-process research and development at the time of acquisition. The effective shareholding of Novartis in Chiron was 41.9% at December 31, 2001 and had a market value of CHF 5.8 billion.

12. Deferred taxes

		2001 CHF millions	2000 CHF millions
Assets associated with	employee benefit liabilities	440	479
	net operating loss carryforwards	215	319
	inventory	1 303	1 159
	intangible assets	193	255
	other provisions and accruals	1 181	1 290
Less: valuation allowance		-97	-237
Deferred tax assets less valuation allowance		**3 235**	3 265
Liabilities associated with	tangible fixed asset depreciation	872	961
	prepaid pensions	1 208	1 164

	2001 CHF millions	2000 CHF millions
other provisions and accruals	1 526	1 054
inventories	279	309
Total liabilities	**3 885**	3 488
Net deferred tax liability	**650**	223

A reversal of the valuation allowance could occur when circumstances make the realization of deferred tax assets probable. This would result in a decrease in the Group's effective tax rate.

At December 31, 2001 and 2000, unremitted earnings of CHF 35 billion and CHF 29 billion respectively, 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 immaterial income tax charge would result based on the tax statutes currently in effect.

13. Other financial assets

	2001 CHF millions	2000 CHF millions
Long-term loans to associated companies		6
Other investments and long-term loans	2 185	1 489
Prepaid pension	4 842	4 106
Total	**7 027**	5 601

At December 31, 2001 other investments and long-term loans are valued at market value. At December 31, 2000 net unrealized gains were CHF 771 million which prior to the adoption of IAS 39 on January 1, 2001 were not recognized.

During 2001, CHF 20 million of unrealized losses on investments were considered to be other than temporary and were charged to the income statement.

14. Inventories

	2001 CHF millions	2000 CHF millions
Raw material, consumables	772	1 315
Finished products	3 340	2 807
Total inventories	**4 112**	4 122

At December 31, 2001 and 2000, inventory write-downs of CHF 651 million and CHF 386 million respectively were deducted in arriving at the inventory values.

15. Trade accounts receivable

	2001 CHF millions	2000 CHF millions
Total	5 645	5 531

	2001 CHF millions	2000 CHF millions
Provision for doubtful receivables	-296	-248
Total trade accounts receivable, net	**5 349**	5 283

16. Other current assets

		2001 CHF millions	2000 CHF millions
Withholding tax recoverable		294	499
Gerber Life insurance receivables		304	462
Advance payments in respect of acquisitions			105
Fair value of financial derivatives		457	225
Prepaid expenses	third parties	303	437
	associated companies	8	4
Other receivables	third party	1 502	1 035
	associated companies	15	9
Amounts receivable from Syngenta		12	235
Total other current assets		**2 895**	3 011

17. Details of share capital movements

	Number of shares[1]					
	Jan 1, 2000	Movement in year	Dec 31, 2000	Dec 31, 2000 restated after share split[2]	Movement in year	Dec 31, 2001
Total Novartis shares	72 130 117		72 130 117	2 885 204 680		**2 885 204 680**
Treasury shares						
Shares reserved for convertible bonds	131 122	-13 206	117 916	4 716 640	-212 886	4 503 754
Shares reserved for call options					54 901 962	54 901 962
Unreserved treasury shares	6 380 635	464 676	6 845 311	273 812 440	3 806 264	277 618 704
Total treasury shares	6 511 757	451 470	6 963 227	278 529 080	58 495 340	**337 024 420**
Total outstanding shares	65 618 360	-451 470	65 166 890	2 606 675 600	-58 495 340	**2 548 180 260**

	CHF millions	CHF millions	CHF millions	CHF millions	CHF millions	CHF millions
Share capital	1 443		1 443	1 443		1 443
Treasury shares	-130	-9	-139	-139	-30	-169
Outstanding share capital	1 313	-9	1 304	1 304	-30	1 274

1 All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 263 613 980 treasury shares, are dividend bearing.

2 On March 22, 2001 the Company's Annual General Meeting approved the division of each registered share of Novartis AG into 40 identical registered shares and thereby to change their nominal value from CHF 20.00 each to CHF 0.50 each.

18. Long-term financial debts

		2001 CHF millions	2000 CHF millions
Convertible bonds		1 182	1 110
Straight bonds		2 325	961
Liabilities to banks and other financial institutions[1]		277	278
Finance lease obligations		4	8
Total (including current portion of long-term debt)		3 788	2 357
Less current portion of long-term debt		-1 296	-74
Total long-term debts		**2 492**	2 283
Convertible bonds			
USD	USD 750 million 2.00% convertible bonds 1995/2002 of Novartis Capital Ltd., British Virgin Islands[2]	1 163	1 085
CHF	CHF 750 million 1.25% convertible bonds 1995/2002 of Novartis Capital Ltd., British Virgin Islands[3]	19	25
Total convertible bonds		**1 182**	1 110
Straight bonds			
USD	USD 300 million 6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Summit, New Jersey, USA	504	492
USD	USD 250 million 6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Summit, New Jersey, USA	420	410
USD	USD 36 million 9.0% bonds 2006 of Gerber Products Company, Fremont	60	59
EUR	EUR 900 million 4.0% bond 2001/2006 of Novartis Securities Investment Ltd., Hamilton, Bermuda[4]	1 341	
Total straight bonds		**2 325**	961

1 Average interest rate 3.6%. (2000: 3.7%).

2 Bonds of USD 10 000 par value are convertible up to September 30, 2002 into approx. 384.167 issued and outstanding, fully paid registered shares of Novartis AG. Novartis Capital Ltd. has acquired options from the non-consolidated employee share participation and employee benefit foundations to cover partly its obligation to deliver shares under the conversion terms of the bonds. It also has options to cover the balance of its obligations from entities which are consolidated. At December 31, 2001 the outstanding hedge with the non-consolidated entities represented 23.8 million shares. An appropriate number of treasury shares are reserved for the balance. At December 31, 2001 bonds totaling USD 32.6 million had been converted.

The difference between the nominal value of USD 717.4 million and the balance sheet value of USD 692.6 million is due to the discount from the original debt value to the maturity value of 100%.

3

Bonds of CHF 5 000 par value are convertible up to October 9, 2002 into 200 issued and outstanding, fully paid shares of Novartis AG and 5 issued and outstanding fully paid shares of Syngenta AG with each converting bondholder receiving an amount of CHF 239.95 per bond in cash. Novartis Capital Ltd. has acquired options from consolidated entities to cover its obligation to deliver shares under the conversion terms of the bonds. An appropriate number of treasury shares and Syngenta AG shares are reserved. At December 31, 2001 bonds totaling CHF 730.8 million had been converted.

4

Swapped into Japanese yen on inception.

		2001 CHF millions	2000 CHF millions
Breakdown by maturity	2001		74
	2002	1 296	1 204
	2003	30	21
	2004	49	40
	2005	940	907
	2006	1 416	
	Thereafter	57	111
Total		**3 788**	2 357
Breakdown by currency	USD	2 174	2 068
	EUR	174	124
	JPY	1 392	59
	CHF	20	26
	Others	28	80
Total		**3 788**	2 357

Fair Value Comparison	2001 Balance Sheet CHF millions	2001 Fair Values CHF millions	2000 Balance Sheet CHF millions	2000 Fair Values CHF millions
Convertible bonds	1 182	1 713	1 110	2 079
Straight bonds	2 325	2 348	961	984
Others	281	281	286	286
Total	**3 788**	**4 342**	2 357	3 349

Collateralized Long-term Debts and Pledged Assets	2001 CHF Millions	2000 CHF Millions
Total amount of collateralized long-term financial debts	235	263
Total net book value of tangible fixed assets pledged as collateral for long-term financial debts	81	168

The financial debts, including short-term financial debts, contain only general default covenants. The Group is in compliance with these covenants.

The percentage of fixed rate debt to total financial debt was 46%, and 34% at December 31, 2001 and 2000, respectively.

19. Other long-term liabilities

	2001 CHF millions	2000 CHF millions
Employee benefits		
unfunded defined benefit plans	1 102	888
other long-term employee benefits and deferred compensation	186	379
Other post-employment benefits	698	676
Liabilities for insurance activities	719	627
Environmental provisions	224	207
Provision for legal and product liability settlements	337	357
Deferred purchase consideration		217
Restructuring provision	10	17
Other provisions	554	477
Total	**3 830**	3 845

20. Movements in other long-term liabilities

a) Restructuring charges: The Group has experienced significant merger and divestment activity since 1996, when Sandoz AG and Ciba-Geigy AG merged to form Novartis, and the Group divested Ciba Specialty Chemicals ("CSC") with effect from January 1, 1997. Restructuring accruals in 1996 totaled CHF 4 126 million, comprised of employee termination costs of CHF 1 945 million, other third party costs of CHF 1 594 million and tangible fixed asset impairments of CHF 587 million. Charges for restructuring plans were related to continuing operations, including the reduction of excess staffing, the streamlining of facilities and operations and other restructuring measures. 12 000 employees were identified in the original plan all of whom have now left the Group. All other significant actions associated with the restructuring charge were completed by December 31, 2001 with the exception of CHF 82 million relating primarily to non-cancellable lease payments for unoccupied office space in the U.S.

In July 1999, charges of CHF 70 million were incurred in conjunction with the plan to downsize certain pharmaceutical production facilities mainly in the USA and Canada. The charges comprised employee termination costs of CHF 54 million and other third party costs of CHF 16 million. 146 employees were identified in the original plan, all of whom have left the Group as of December 31, 2001.

In October 2000, the CIBA Vision sector acquired Wesley Jessen VisionCare Inc., a leading worldwide developer, manufacturer and marketer of specialty contact lenses. Total costs of CHF 118 million were incurred in connection with the integration and restructuring of the CIBA Vision and Wesley Jessen activities worldwide. CHF 41 million was charged to operating income and CHF 77 million was included in the net assets acquired. The total cost comprised employee termination costs of CHF 59 million, other third party costs of CHF 35 million and tangible fixed asset impairments of CHF 24 million. 1 100 employees were identified in the original plan, of which 85 remain employed by the Group as of December 31, 2001, but all of whom are expected to leave in 2002. All other significant actions associated with the plan are expected to be completed during 2002.

In November 2000, charges of CHF 15 million were incurred in conjunction with the closure and relocation of part of the Generics operations in the USA. All of these charges are for employee termination costs. 200 employees were identified in the original plan, of which 2 remain employed by the Group as of December 31, 2001 but all of whom are expected to leave in 2002. All other significant actions associated with the plan are expected to be completed during 2002.

In December 2000, charges of CHF 40 million were incurred in conjunction with the closure and sale of the Pharmaceuticals sector Summit site in the USA. The charges comprised employee termination costs of CHF 10 million and other third party costs of CHF 30 million. 122 employees were identified in the original plan, of which 73 remain employed by the Group as of December 31, 2001, but all of whom are expected to leave in 2002. All other significant actions associated with the plan are expected to be completed by March 2003.

In May 2001, charges of CHF 21 million were incurred in relation to the closure of the Consumer Health production facility in Kings Langley, UK. The charges comprised employee termination costs of CHF 19 million and other third party costs of CHF 2 million. 250 employees were identified in the original plan, of which 240 remain employed by the Group as of December 31, 2001, but all of whom are expected to leave in 2002.

The releases to income in 2001 and 2000 of CHF 18 million and CHF 39 million respectively were mainly due to settlement of liabilities at lower amounts than originally anticipated.

	Employee termination costs CHF millions	Tangible fixed asset impairments CHF millions	Other third party costs CHF millions	Total CHF millions
Balance at January 1, 2000	280	42	238	560
Cash payments	-201		-91	-292
Releases	-20	-8	-11	-39
Additions	90	24	64	178
Non-income tangible fixed asset write-offs		-4		-4
Effect of Agribusiness spin-off	-10	-2	-6	-18
Translation effect, net	1	1	10	12
Balance at December 31, 2000	140	53	204	397
Cash payments	-85		-83	-168
Releases	-16	-1	-1	-18
Additions	19		2	21
Translation effect, net	1		3	4
Balance at December 31, 2001	**59**	**52**	**125**	**236**
Included in short-term liabilities				226
Included in long-term liabilities				10
Total				**236**

Tangible fixed asset impairments are determined based on the review of the carrying values of tangible fixed assets. Write-downs are recorded for tangible fixed assets impaired or related to activities to be restructured, divested or abandoned. The provision is transferred to accumulated depreciation as the tangible fixed assets are restructured, divested or abandoned.

Other third party costs are mainly associated with lease and other obligations due to the abandonment of certain facilities.

In 2000, CHF 77 million of the additions arose from provisions made during the acquisition of Wesley Jessen. In 2001, there were also CHF 30 million (2000: CHF 7 million) of tangible fixed asset impairments which were charged directly to the income statement without being recorded in the restructuring provision.

b) Environmental matters: Novartis has provisions in respect to environmental remediation costs in accordance with the accounting policy described in Note 1. These provisions include future remediation payments totaling CHF 22 million which have been discounted at a risk free rate of 6% to a recorded liability of CHF 11 million. These discounted amounts will be paid out over the period of remediation for the applicable sites, which is expected to be 30 years. The accrual recorded at December 31, 2001 consists of CHF 106 million provided for remediation at third-party sites and CHF 122 million for remediation of owned facilities.

In the USA, Novartis Agribusiness was 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 several sites. The responsibility for these sites was allocated to Syngenta as part of the spin-off process. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The estimated reserve 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 a risk assessment based on investigation of the various sites. 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.

Novartis believes that its reserves 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 accrued. 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 Novartis financial condition but could be material to the Novartis results of operations in a given period.

Environmental liability provisions

	2001 CHF millions	2000 CHF millions
January 1	214	379
Cash payments	-3	-35
Releases	-6	
Additions	22	24
Effect of Agribusiness spin-off		-166
Translation effect, net	1	12
December 31	228	214
Less short-term liability	-4	-7
Long-term liability at December 31	**224**	207

c) Provisions for legal and product liabilities

	2001 CHF millions	2000 CHF millions
January 1	639	496
Cash payments	-190	-43
Releases	-24	
Additions	129	283
Effect of Agribusiness spin-off		-98
Translation effect, net	-24	1
December 31	530	639
Less short-term liability	-193	-282
Long-term liability at December 31	**337**	357

21. Short-term financial debts

	2001 CHF millions	2000 CHF millions
Interest bearing employee accounts	1 134	1 216

	2001 CHF millions	2000 CHF millions
Other bank and financial debt	1 629	1 837
Commercial paper	1 004	408
Current portion of long-term financial debt	1 296	74
Financial obligation for repurchase agreements	11	244
Total	**5 074**	3 779

The balance sheet values of short-term financial debt, other than the current portion of long-term 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 financial debt was 3.8% and 4.5% as of December 31, 2001 and 2000, respectively.

22. Other short-term liabilities

	2001 CHF millions	2000 CHF millions
Income and other taxes	879	1 263
Restructuring provisions	226	380
Accrued expenses	3 479	3 098
Current portion of provision for potential claims from insurance activities	299	250
Social security/pension funds	101	150
Current portion of environmental provisions	4	7
Deferred income relating to government grants	22	25
Deferred divestment proceeds		155
Deferred purchase consideration	240	
Fair value of financial derivatives	1 134	91
Provisions for goods returned and commissions	14	14
Provision for legal and product liability settlements	193	282
Amount due to Syngenta	2	25
Other payables	753	530
Total	**7 346**	6 270

23. Cash flows arising from changes in working capital excluding restructuring items

	2001 CHF millions	2000 CHF millions
Change in inventories	-77	230
Change in trade accounts receivable and other net current assets	33	-229
Change in trade accounts payable	249	106
Total	**205**	107

24. Cash flows arising from major acquisitions and divestments of subsidiaries

The following is a summary of the cash flow impact of the major divestments and acquisitions of subsidiaries:

	2001 Acquisitions CHF millions	2001 Divestments CHF millions	2000 Acquisitions CHF millions	2000 Divestments CHF millions
Tangible fixed assets	-52	23	-199	2 491
Other long-term assets	-61		-105	2 415
Inventories	-46		-196	2 551
Trade accounts receivable and other current assets	-73		-165	2 631
Marketable securities, cash and short-term deposits	-18		-51	-70
Long-term and short-term debt to third parties	148		200	-3 336
Trade accounts payable and other liabilities	83	2	635	-2 918
Net assets acquired/divested	-19	25	119	3 764
Less acquired/divested liquidity	18		51	70
Less decrease in investments in associated companies	111			
Sub-total	110	25	170	3 834
Goodwill	-349		-1 612	
Changes in equity and minority interests due to:				
net assets transferred to Syngenta				-4 463
proceeds received from Novartis shareholders in respect of Syngenta related purchase rights				687
other				12
Divestment gains		45		1
Net Cash Flow	**-239**	**70**	-1 442	71

The significant changes in the companies that have been consolidated are described in note 2.

All acquisitions were for cash. The significant divestment in 2000 was the spin-off of Novartis Agribusiness to form Syngenta AG.

The following are the cash flows from the discontinued Agribusiness sector included in the consolidated cash flow statement.

	2000 CHF millions
Cash flow from operating activities	1 437
Cash flow from investing activities	-166
Cash flow from financing activities	-818
	119

25. Changes in consolidated equity

a) The Board of Directors proposes a dividend of CHF 0.90 per share for 2001 (2000: CHF 0.85 per share amounting to CHF 2.2 billion which was paid in 2001) totaling CHF 2.4 billion for all dividend bearing shares, or CHF 2.3 billion on all shares outstanding at December 31, 2001. The amount available for dividend distribution is based on the Novartis AG's shareholders' equity determined in accordance with the legal provisions of the Swiss Code of Obligations.

b) At the extraordinary general meeting of October 11, 2000 the shareholders reduced the Novartis AG share premium account to the legal minimum by approving a transfer of the excess to the Group's available retained earnings.

c) The effect of the Agribusiness spin-off is shown net of the amount received from shareholders for the exercise of purchase rights of CHF 687 million.

d) During the year bonds were sold and the subsidiary holding the bonds was liquidated. This resulted in CHF 641 million (2000: CHF 1 041 million) of cumulative translation differences and a CHF 34 million hedging loss (2000: CHF 96 million hedging gain) being transferred to financial income, net.

e) The amount recorded directly to equity as a result of adopting IAS 39 on financial instruments from January 1, 2001 and the 2001 changes in the fair value of financial instruments and transfers to the income statement consist of the following:

	Retained earnings CHF millions	Fair value of deferred cash flow hedges CHF millions	Total CHF millions
January 1, 2001 fair value adjustments			
Available-for-sale marketable securities	1 891		1 891
Derivative financial instruments	265	138	403
Deferred tax on above	-213	-35	-248
Effect of introducing IAS 39 on January 1, 2001	1 943	103	2 046
Changes in fair value:			
Available-for-sale marketable securities	-150		-150
Cash flow hedges		18	18
Realized gains or losses transferred to the income statement:			
marketable securities sold	-648		-648
derivative financial instruments	-265	-152	-417
Impaired securities and investments	101		101
Deferred tax on above	73	11	84
Fair value adjustments at December 31, 2001	**1 054**	**-20**	**1 034**

f) CHF 3 848 million of treasury shares were acquired during 2001 under the Group's second share buy-back program. A further CHF 7 million of treasury share movements arise from non-cash treasury share purchases by the Group's associated company, Chiron Corporation, USA.

g) During December 2001, Novartis sold a total of 55 million ten-year call options (Low Exercise Price Options-"LEPOs") on Novartis shares, with an exercise price of CHF 0.01, to a third party receiving EUR 2.2 billion in proceeds (EUR 40 per LEPO). It is the current intention that the LEPOs will be settled using Novartis treasury shares. The Group has accounted for the LEPOs as an increase in share premium at fair value less related issuance costs. Exercises will be recorded as a share issuance with no gains or losses recorded in the consolidated income statement.

h) Novartis sold a total of 55 million nine and ten-year put options on Novartis shares to a third party with an exercise price of EUR 51 receiving EUR 0.6 billion in proceeds (EUR 11 per put option). The put options can be exercised in annual tranches between the years three and ten, and can be either physically settled or net share settled at the discretion of Novartis. Under the terms of the put option agreement the number of Novartis shares required for settlement could change under certain circumstances. The contractual terms of the put options place a limit on the number of shares to be delivered in a net share settlement, such that Novartis cannot under any circumstances be forced into a physical settlement by the counterparty. If however the Group chooses to physically settle the put options, this would result in a cash payment to the counterparty. The total possible cash payment measured at the earliest possible exercise date for the two tranches of put options (2004 and 2005) would amount to EUR 3.1 billion, increasing to EUR 3.8 billion at the expiry dates (2010 and 2011) of the two tranches. Novartis may also accelerate the exercise date and expiration date for any outstanding options at any time on or after December 6, 2006 at the accreted exercise price of the put options under certain conditions. The Group has accounted for the option premium associated with the put options as an increase in share premium less related issuance costs. Exercises will be recorded as treasury share transactions with no gains or losses recorded in the consolidated income statement.

The increase of equity due to g) and h) above is after deduction of fees and related taxes of CHF 118 million of which CHF 45 million has yet to be paid.

Total recognized gains and losses, representing the total of net income and translation effects allocated to equity and in 2001, the year's movement in the fair value of financial instruments, for the years ended December 31, 2001 and 2000 were CHF 5 375 million and CHF 6 639 million, respectively.

26. Employee benefits

a) Defined benefit obligation: The Group has, apart from the legally required social security schemes, numerous independent pension plans. For certain Group companies, however, no independent assets exist for the pension and other long-term employee benefit obligations. In these cases the related liability is included in the balance sheet.

Defined benefit pension plans cover the majority of the Group's employees. The defined benefit obligations and related assets of all major plans are reappraised annually by independent actuaries.

Plan assets are recorded at fair values. The defined benefit obligations of all significant plans are covered by assets.

The following is a summary of the status of the main defined benefit plans at December 31, 2001 and 2000:

	2001 CHF millions	2000 CHF millions
Funded assets of independent defined benefit pension plans	23 361	25 426
Defined benefit obligations of active and retired employees	-18 616	-17 662
Funded Status	4 745	7 764
Limitation on recognition of surplus due to uncertainty of obtaining future benefits	-1 422	-1 965
Unrecognized actuarial loss/(gain)	417	-2 581
Net asset in balance sheet	**3 740**	3 218

The net asset in the balance sheet consists of:

	2001 CHF millions	2000 CHF millions
Prepaid pension expense included in financial assets	4 842	4 106
Accrued pension costs included in other long-term liabilities	-1 102	-888
Total net asset	**3 740**	3 218

The following are the principal actuarial assumptions, used for calculating the 2001 and 2000 income statement amounts and the above December 31, 2001 and 2000 funded status of the main defined benefit plans:

	Income statement		Funded status	
Weighted average %	2001 %	2000 %	2001 %	2000 %
Discount rate	4.6	4.1	4.6	4.5
Payroll indexation	2.8	2.8	2.8	2.8
Return on assets	6.1	6.2	6.1	6.2

In some Group companies employees are covered by defined contribution plans and other long-term employee benefits. The liability of the Group for these benefits is reported in other long-term employee benefits and deferred compensation and at December 31, 2001 amounts to CHF 186 million (2000: CHF 379 million). In 2001 contributions charged to the consolidated income statement for the defined contribution plans were CHF 113 million (2000: CHF 91 million).

The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2001 was 34 million shares with a market value of CHF 2.0 billion (2000: CHF 44 million shares with a market value of CHF 3.1 billion).

The plan disposed of 8.5 million Novartis AG shares during the year ended December 31, 2001 (2000: 4.5 million shares). The amount of dividends received on Novartis AG shares held as plan assets was CHF 34 million for the year ended December 31, 2001 (2000: CHF 37 million).

b) Other post-employment benefits: The Group's post-employment healthcare, insurance and other related post-employment benefits are not funded.

The following are the principal actuarial assumptions used for calculating these post-employment benefits:

	2001 Weighted average %	2000 Weighted average %
Discount rate	7.5	7.7
Healthcare cost trend (initial)	9.0	5.9
Healthcare cost trend (ultimate)	4.8	4.8

The following is a summary of the balance sheet movements in relation to defined benefit plans and other post-employment benefits:

	Defined benefit pension plans		Other post-employment benefits	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Asset/(liability) at January 1	3 218	2 564	-676	-630
Increase in prepaid pensions	736	419		
Decrease/(increase) in accrued liabilities	-214	235	-22	-46
Asset/(liability) at December 31	**3 740**	3 218	**-698**	-676

The amounts recognized in the income statement are as follows:

	Defined benefit pension plans		Other post-employment benefits	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Expected return on plan assets	1 517	1 584		
Employee contributions	33	39		
Current service cost	-359	-467	-15	-11
Interest cost	-825	-857	-52	-48
Amortization of actuarial gains and losses	-21	49	-5	-18
Income/(expense)[1]	**345**	348	**-72**	-77

[1] In 2001 CHF 108 million of settlement gains associated with Group restructurings were included in pension income. In 2000 settlement gains of CHF 52 million resulting from the Agribusiness spin-off were credited directly to equity.

The actual return on plan assets for 2001 taking into account realized and unrealized capital gains and losses was a loss of CHF 737 million (2000: CHF 2 949 million gain).

27. Employee share participation plans

In May 2001, the Novartis AG shares were split 40 to 1. All references to shares in 2000 have been restated to reflect this change.

Employee and management share participation plans exist as follows:

a) Swiss Employee Share Ownership Plan: In 1998, a Swiss Employee Share Ownership Plan was introduced for all employees of Swiss subsidiaries. This entitles employees after one year of service to acquire 120 shares in Novartis AG every year at a price determined by the Board's compensation committee, which is currently CHF 12.50 per share. Employees are immediately required to buy the shares to which they have become entitled. During the year 862 720 shares (2000: 1 429 520 shares) were distributed under this plan.

b) Non-US Share Option Plan: Under the current plan, options, exercisable after two years and terminating after nine years, are granted annually as part of the remuneration of executive officers and other employees outside of the USA, selected by the Board's compensation committee. Each option entitles them to acquire Novartis AG shares (40 shares per option) at a predetermined strike price. The

number of options granted depends on the performance of the individuals and the sector in which they work.

	2001		2000	
	Options (000)	Weighted average exercise price[1] CHF	Options (000)	Weighted average exercise price[1] CHF
Options outstanding at January 1	147	53	89	53
Granted	62	70	61	51
Exercised	-24	-50	-2	27
Cancelled	-4	59	-1	59
Outstanding at December 31	**181**	**59**	147	53
Exercisable at December 31	61	56	49	45
Weighted average fair value of options on 40 shares granted during the year (CHF)			937	900

[1] 40 shares per option; exercise price indicated is per share.

All options were granted at an exercise price which was greater than the market price of the Group's shares at the grant date.

The following table summarizes information about share options outstanding at December 31, 2001:

		Options outstanding		Options exercisable	
Range of exercise prices[1] (CHF)	Number outstanding (000)	Average remaining contractual life (years)	Weighted average exercise price (CHF)	Number exercisable (000)	Weighted average exercise price (CHF)

		Options outstanding		Options exercisable	
41-46	26	5.2	43	26	42
51-73	155	7.4	62	35	69
	181	7.1	59	61	56

[1] 40 shares per option; exercise price indicated is per share.

c) US ADS Incentive Plan: The US ADS Incentive Plan was introduced in 2001 and supplements the previous US Management ADS Appreciation Cash Plan. Under the US ADS Incentive Plan, options are granted annually on Novartis ADSs at a pre-determined strike price as part of the remuneration of executive officers and other employees selected by the Board's compensation committee. The number of options granted depends on the performance of the individuals and of the sector in which they work. Options are exercisable after three years and terminate after ten years. Under the previous US Management ADS Appreciation Cash Plan, Novartis employees in the USA were entitled to cash compensation equivalent to the increase in the value of Novartis ADSs compared to the market price of the ADSs on the grant date.

In 2001, 8 526 650 options on ADSs were granted (2000: 4 863 940 ADS Appreciation Rights on Novartis ADSs).

d) Management Share Programs: In 2001 and 2000 Management Share Programs were established. The grants in relation to these programs are designed to foster long-term participation for

eligible employees by aligning their contribution to the long-term performance of the Group and for special contributions. In certain programs grants vest only after three years. During 2001 a total of 499 194 shares (2000: 307 520 shares) were granted to executive officers and other employees.

e) Leveraged Share Savings Program: In 2001, a new Leveraged Share Savings Program was offered to selected executive officers and other employees, who can make an election to receive all or part of their regular cash bonus in shares. If shares are received instead of cash, the shares are blocked for a five year period. At the end of the blocking period, Novartis will match the bonus taken in shares on a one-for-one basis. During 2001, 209 240 shares were chosen to be taken under this program instead of a cash bonus.

All of the above mentioned plans are wholly funded by a Novartis employee share participation foundation which is not consolidated.

Movements in Novartis AG shares held by the Novartis employee share participation foundation were as follows:

	2001 Number of shares (000)	2000 Number of shares (000)
January 1	98 000	89 720
Shares bought in the market	4 175	9 720
Shares distributed to employees	-863	-1 440
December 31	**101 312**	98 000

The market value of the Novartis AG shares held by the foundation at December 31, 2001 was CHF 6.1 billion (2000: CHF 7.0 billion).

28. Related parties

The Novartis Group has formed certain foundations with the purposes of advancing employee welfare, employee share participation, research and charitable contributions. The charitable foundations foster health care and social development in rural countries. The foundations are autonomous, and their boards are responsible for administering the foundations in accordance with the foundations' purpose and applicable law.

The employee share participation foundation has not been included in the consolidated financial statements prepared under IAS as Interpretation No. 12 of the IAS Standing Interpretations Committee exempts post-employment and equity compensation plans from its scope. The total assets of this foundation as of December 31, 2001 included 101.3 million shares of Novartis AG with a market value of CHF 6.1 billion. As of December 31, 2000, the assets included 98 million Novartis shares with a market value of CHF 7.0 billion. This foundation is consolidated under US GAAP and is included as a reconciling item in the US GAAP reconciliation.

In 2001, the Group granted short-term loans totaling CHF 1 189 million to the above mentioned foundations and received short-term loans totaling CHF 10 million from them. In 2000, the Group granted short-term loans totaling CHF 936 million to the foundations, received short-term loans totaling CHF 6 million from them and sold 1.4 million Novartis shares to them at market rates.

In addition, there are approximately twenty other foundations that were established for charitable purposes that have not been consolidated, as the Group does not receive a benefit therefrom. As of December 31, 2001 these foundations held approximately 6.2 million shares of Novartis, with a cost of approximately CHF 39 million.

See notes 5, 26 and 27 to the consolidated financial statements for disclosure of other related party transactions and balances.

29. Commitments and contingencies

Novartis Agribusiness: In connection with the Agribusiness Master Agreement between Novartis AG and AstraZeneca Plc for the spin-off and merger of their respective agrochemical businesses into Syngenta AG, there remain several assets which are not material to the business of Novartis that have not been transferred as of December 31, 2001. This is due to legal requirements that necessarily prolong administrative proceedings required for such transfer. All such administrative proceedings have been initiated and Novartis expects no difficulties for all remaining transfers to be completed during 2002.

Pursuant to the Master Agreement and related service agreements, Novartis and Syngenta, and their local subsidiaries, have agreed to render each other specified services for an interim period. These services include support for human resources; health; safety and environment; insurance; legal and other functional areas. None of the services are material to the business of Novartis and are provided merely as an accommodation to permit an orderly separation of the businesses in a manner that efficiently addresses local concerns.

Chiron Corporation: In addition to its investment in shares of Chiron, Novartis has agreed to:

purchase up to USD 500 million of new Chiron equity, at Chiron's request. To date, Chiron has made no such request.

guarantee up to USD 703 million of Chiron debt. Utilization of the guarantee in excess of USD 425 million reduces the equity put amount mentioned above.

guarantee an additional USD 200 million of credit facilities to enable repayment of certain convertible debt of Chiron.

Leasing commitments:

	2001 CHF millions
Commitments arising from fixed-term operational leases in effect at December 31 are as follows:	

	2001 CHF millions
2002	191
2003	132
2004	84
2005	65
2006	54
Thereafter	208
Total	**734**
Expense of current year	**204**

Research & development commitments: The Group has entered into other long-term research agreements with various institutions, including CHF 420 million of potential milestone and other contingent payments. As of December 31, 2001 they are as follows:

	2001 CHF millions
2002	482
2003	409
2004	258
2005	161
2006	134
Thereafter	36
Total	**1 480**

Contingencies: Group companies have to observe the laws, government orders and regulations of the country in which they operate. A number of them are currently involved in administrative proceedings arising out of the normal conduct of their business. In the opinion of Group management, however, the outcome of the actions referred to will not materially affect the Group's financial position, result of operations or cash flow.

The Group, along with numerous other prescription drug manufacturers, is a defendant in various actions brought by certain US retail pharmacies, alleging antitrust and pricing violations. The Group believes that these actions are without merit and is defending them vigorously.

A number of Group companies are also the subject of litigation arising out of the normal conduct of their business, as a result of which claims could be made against them which, in whole or in part, might not be covered by insurance. In the opinion of Group management, however, the outcome of the actions referred to will not materially affect the Group's financial position, result of operations or cash flow.

The material components of the Group's potential environmental liability consist of a risk assessment based on 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. The Group does not expect the resolution of such uncertainties to have a material effect on the consolidated financial statements.

30. Principal currency translation rates

	2001 CHF	2000 CHF

		2001 CHF	2000 CHF
Year end rates used for the consolidated balance sheets:			
1	USD	1.68	1.64
1	EUR	1.48	1.52
1	GBP	2.43	2.45
100	JPY	1.28	1.43
Average rates of the year used for the consolidated income and cash flow statements:			
1	USD	1.69	1.69
1	EUR	1.51	1.56
1	GBP	2.43	2.56
100	JPY	1.39	1.57

31. Subsequent events

On January 17, 2002, the Animal Health sector announced the closing of the acquisition of two US farm animal vaccine companies, Grand Laboratories Inc., of Larchwood, Iowa and ImmTech Biologics Inc., of Bucyrus, Kansas.

Their combined 2001 revenues were approximately CHF 55 million (USD 33 million) and their combined purchase price is a minimum of CHF 160 million of which CHF 140 million will be settled in Novartis American Depositary Shares (ADS). The final purchase price may increase depending on whether certain future sales and other targets are met.

The acquisitions will be accounted for under the purchase method of accounting, and related goodwill, if any, will be amortized on a straight-line basis over a period not exceeding 20 years.

Principal Companies of the Novartis Group

33. Significant Differences Between IAS and United States Generally Accepted Accounting Principles (US GAAP)

The Group's consolidated financial statements have been prepared in accordance with IAS, 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	2001 CHF millions	2000 CHF millions
Net income reported under IAS		7 024	7 210
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a	-321	-426
Purchase accounting: other acquisitions	b	-279	-232
Restructuring costs	c		-72
Available-for-sale securities and derivative financial instruments	d	-511	787
Pensions and other post-employment benefits	e	-310	43
Share-based compensation	f	-38	-168
Consolidation of share-based employee compensation foundations	g	-37	-21
Deferred taxes	h	-31	-23
In-process research and development	i	-936	-143
Other	j	28	33
Deferred tax effect on US GAAP adjustments		114	-75
Net income reported under US GAAP		**4 703**	6 913
Basic earnings per share under US GAAP (CHF)		1.90	2.74
Diluted earnings per share under US GAAP (CHF)		1.90	2.74

	Notes	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions
Equity reported under IAS		42 245	36 862
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a	4 826	5 147
Purchase accounting: other acquisitions	b	5 305	5 467
Available-for-sale securities and derivative financial instruments	d		2 111
Pensions and other post-employment benefits	e	1 431	1 730
Share-based compensation	f	-58	-66
Consolidation of share-based employee compensation foundation	g	-939	-753
Deferred taxes	h	-621	-590
In-process research and development	i	-1 148	-173
Other	j	102	92
Deferred tax effect on US GAAP adjustments		-396	-1 025
Equity reported under US GAAP		**50 747**	48 802

Components of equity in accordance with US GAAP

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions
Share capital	1 443	1 443
Treasury shares, at nominal value	-220	-189
Share premium	1 338	-2 493

	Dec 31, 2001 CHF millions	Dec 31, 2000 CHF millions
Retained earnings	47 422	48 661
Accumulated other comprehensive income:		
Currency translation adjustment	46	321
Unrealized market value adjustment on available-for-sale securities (net of taxes of CHF 115 million and CHF 213 million, respectively)	738	1 059
Unrealized market value adjustment on cash-flow hedges (net of taxes of CHF 24 million)	-20	
December 31	50 747	48 802

Changes in US GAAP equity

	CHF millions
January 1, 2000	50 575
Net income for the year under US GAAP	6 913
Dividends paid	-2 064
Net unrealized market value adjustment	857
Increase in share premium related to share-based compensation	73
Foreign currency translation adjustment	-525
Acquisition of treasury shares	-1 758
Effect of Agribusiness spin-off	-5 269
December 31, 2000	48 802
Change in accounting policy on cash flow hedges (CHF 138 million before taxes)	105
Net income for the year under US GAAP	4 703
Dividends paid	-2 194
Net unrealized market value adjustment	-446
Increase in share premium related to share-based compensation	46
Foreign currency translation adjustment	-275
Acquisition of treasury shares	-4 005
Issue of call and put options on Novartis shares	4 011
December 31, 2001	**50 747**

Discontinued Operations

The income from continuing and discontinued Agribusiness operations under US GAAP for the years ended December 31, 2001 and 2000 respectively is as follows:

	2001 CHF millions	2000 CHF millions
Income from continuing operations under US GAAP	4 703	6 346
Income from discontinued operations under US GAAP (net of taxes of CHF 314 million)		567
Net income reported under US GAAP	**4 703**	6 913

Earnings per share

	2001 CHF	2000 CHF
Basic:		
Income from continuing operations under US GAAP	1.90	2.52
Income from discontinued operations under US GAAP		0.22
Basic earnings per share under US GAAP	**1.90**	2.74
Diluted:		
Income from continuing operations under US GAAP	1.90	2.52
Income from discontinued operations under US GAAP		0.22
Diluted earnings per share under US GAAP	**1.90**	2.74

a) Purchase accounting: Ciba-Geigy: The accounting treatment for the 1996 merger of Sandoz and Ciba-Geigy under IAS is different from the accounting treatment under US GAAP. For IAS purposes the merger was accounted for as a uniting of interests, however, for US GAAP the merger does not meet all of the required conditions of Accounting Principles Board Opinion No. 16 for a pooling of interests and therefore is accounted for as a purchase under US GAAP. Under US GAAP, Sandoz would be deemed to be the acquirer with the assets and liabilities of Ciba-Geigy being recorded at their estimated fair values and the results of Ciba-Geigy being included from December 20, 1996. Under US GAAP, the cost of Ciba-Geigy to Sandoz was approximately CHF 38.1 billion.

The components of the equity and income statement adjustments related to the US GAAP purchase accounting adjustment for 2001 and 2000 are as follows:

	2001 Components to reconcile		2000 Components to reconcile	
CHF millions	**Net Income**	**Equity**	**Net Income**	**Equity**
Intangible assets related to marketed products	-429	6 437	-528	6 865
Tangible fixed assets	69	-1 029	79	-1 098
Inventory		711	-19	711
Other identifiable intangibles	-32	157	-60	188
Investments	-34	169	-34	202
Deferred taxes	105	-1 619	136	-1 721
Total adjustment	**-321**	**4 826**	-426	5 147

The intangible assets related to marketed products and other identifiable intangibles are being amortized over 20 and 10 years, respectively.

As a result of the spin-off of Novartis Agribusiness in November 2000, CHF 1 646 million of the equity adjustment included in the US GAAP net assets was spun-off to shareholders.

b) Purchase accounting: other acquisitions: In accordance with IAS 22 (revised 1993), the difference between the purchase price and the aggregate fair value of tangible and intangible assets and liabilities acquired in a business combination is capitalized as goodwill and amortized over its useful life, not to exceed 20 years. Under US GAAP, the difference between the purchase price and fair value of net assets acquired as part of a business combination is capitalized as goodwill and amortized through the income statement over its estimated useful life, which may not exceed 40 years. For the purpose of the reconciliation to US GAAP, goodwill is generally being amortized through the income statement over an estimated useful life of 20 years.

Prior to January 1, 1995, the Group wrote off all goodwill directly to equity, in accordance with IAS existing at that time. The adoption of IAS 22 (revised 1993) did not require prior period restatement. The material component of goodwill recorded directly to equity, under IAS prior to January 1, 1995, related primarily to the acquisition of Gerber Products in 1994. The net book value of goodwill under US GAAP attributable to Gerber Products was CHF 4 815 million and CHF 4 845 million as of December 31, 2001 and 2000, respectively and is being amortized over

40 years.

c) Restructuring costs: Under IAS, restructuring charges are accrued against operating income in the period management commits itself to a plan, it is probable a liability has been incurred and the amount can be reasonably estimated. Up to January 1, 2000 US GAAP was more prescriptive than IAS; for example, in order to qualify as restructuring costs under US GAAP, it was necessary that employees were informed regarding the key provisions of the restructuring plan prior to the end of the reporting period. Also, there was a rebuttable presumption under US GAAP that an exit plan would be

completed and the exit costs incurred within one year from the commitment date. Therefore, certain costs permitted to be accrued under IAS up to January 1, 2000 were not allowable under US GAAP resulting in an additional US GAAP expense in 2000 of CHF 72 million. There was no measurement difference in 2001.

The following schedule reconciles restructuring accruals under IAS to amounts determined under US GAAP.

	2001 CHF millions	2000 CHF millions
Total accruals in accordance with IAS	236	397
Reclassification of restructuring accruals to tangible fixed assets	-52	-53
Restructuring accruals in accordance with US GAAP	**184**	344

Restructuring accruals according to US GAAP comprise the following:

	2001 CHF millions	2000 CHF millions
Employee termination costs	59	140
Other third party costs	125	204
Restructuring accruals in accordance with US GAAP	**184**	344

d) Available-for-sale securities and derivative financial instruments: Prior to the adoption of IAS 39 from January 1, 2001 in the IAS consolidated financial statements, investments were stated at the lower of cost or market value on an individual basis. Any losses resulting from the application of the lower of cost or market valuation was charged to the income statement. US GAAP requires for all years presented that investments in debt and certain equity securities are classified as either trading, available-for-sale, or held-to-maturity, depending on management's intent and ability with respect to holding such investments. Investments classified as available-for-sale are carried at fair value, with any unrealized gain or loss recorded as a separate component of equity. The Group's application of IAS 39 from January 1, 2001 is now consistent with US GAAP although under US GAAP the policy of recording in a separate component of equity unrealized gains or losses on available-for-sale marketable securities has been applied for a number of years. This results in a different amount of unrealized gains or losses being recorded in the separate component of equity under US GAAP compared to IAS and an additional expense under US GAAP on disposal of available-for-sale securities during 2001.

Under US GAAP for all years presented, the Group values all of its derivative financial instruments, except those related to cash flow hedges, that do not qualify for hedge accounting to fair value on an individual basis through the income statement. Concerning cash flow hedges, SFAS No. 133 *"Accounting for Derivative Instruments and Hedging Activities"* adopted from January 1, 2001 requires all derivative instruments including cash flow hedges be recorded on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive income. This resulted in the Group recording a net of tax cumulative-effect-type gain of CHF 105 million in accumulated other comprehensive income to recognize at fair value all derivative instruments that are designated as cash flow hedging instruments.

Prior to the adoption of IAS 39 on January 1, 2001 under IAS, the Group used the concept of portfolio valuation and only recorded net losses on portfolios of similar derivative financial instruments through the income statement, except for items that qualified for hedge

accounting. Unrealized gains were not recorded. This also results in a difference between the IAS and US GAAP income statements due to recognition of gains or losses in different periods.

The above differences result in an additional US GAAP expense of CHF 511 million in 2001 (2000: CHF 787 million income).

At December 31, 2001 the balance sheet values of all financial instruments under IAS and US GAAP are the same. At December 31, 2000 net unrealized gains of CHF 2.1 billion had not been recorded in the IAS consolidated financial statements, under the pre-IAS 39 accounting policies.

e) Pension and other post-employment benefits: Under IAS, pension costs and similar obligations are accounted for in accordance with IAS 19, *"Employee Benefits"*. For purposes of US GAAP, pension costs for defined benefit plans are accounted for in accordance with SFAS No. 87 *"Employers' Accounting for Pensions"* and the disclosure is presented in accordance with SFAS No. 132 *"Employers' Disclosures about Pensions and Other Post-retirement Benefits"*. The version of IAS 19 in force up to December 31, 1998 required that the discount rate used in the calculation of benefit plan obligations is of an average long-term nature, whereas US GAAP requires that the discount rate is based on a rate at which the obligations could be currently settled.

The following is a reconciliation of the balance sheet and income statement amounts recognized for IAS and US GAAP for both pension and post-employment benefit plans:

	2001 CHF millions	2000 CHF millions
Pension benefits:		
Prepaid asset recognized for IAS	3 740	3 218
Difference in unrecognized amounts	1 637	1 874
Prepaid asset recognized for US GAAP	**5 377**	5 092
Net periodic income recognized for IAS	345	348
Amortization of transition asset		88
Difference in amortization of actuarial amounts	-237	-78
Net periodic pension benefit income recognized for US GAAP	**108**	358
Other post-employment benefits:		
Liability recognized for IAS	-698	-676
Difference in unrecognized amounts	-206	-144
Liability recognized for US GAAP	**-904**	-820
Net periodic benefit recognized for IAS	-72	-77
Amortization of actuarial amounts	-73	33
Net periodic post-employment benefit costs recognized for US GAAP	**-145**	-44
Total US GAAP income statement difference on pensions and other post-employment benefits	**-310**	43

f) Share-based compensation: The Group does not account for share-based compensation, as it is not required under IAS. Under US GAAP, the Group applies Accounting Principles Board Opinion No. 25 *"Accounting for Stock Issued to Employees"* and related interpretations in accounting for its plans. As described in Note 27, the Group has several plans that are subject to measurement under APB No. 25. These include the Non-US Share Option Plan, the Swiss Employee Share Ownership Plan, the US Management ADS Appreciation Cash Plan, the US ADS Incentive Plan, Leveraged Share Savings Program and the other Management Share Programs.

The Non-US Share Option Plan from 2001 is considered to be a fixed plan under APB No. 25 as the number of shares and all other parameters are known on the grant date which is therefore the measurement date. In prior years this was considered to be a variable plan, and until all parameters were fixed, the compensation expense was recorded at the balance sheet date by estimating the ultimate number of shares to be issued multiplied by the spread between the share price on the balance sheet date and the strike price. There was no compensation expense in 2001 (2000: CHF 11 million) since the grant date and measurement date are now the same and the strike price at that date was greater than the market price.

The Swiss Employee Share Ownership Plan is considered to be compensatory based on the amount of the discount allowed for employee share purchases. Compensation expense is recorded at the grant date and is calculated as the spread between the share price and the strike price on that date. During 2001, the Group sold 862 720 shares (2000: 1 429 520 shares) to employees for CHF 11 million (2000: CHF 18 million). Compensation expense for 2001 recognized under the Ownership plan was CHF 46 million (2000: CHF 72 million). The discount to the Group's share price was recorded in share premium. The percentage discount to the Group's share price under the ownership plan was 88% in 2001 (2000: 83%).

The US Management ADS Appreciation Cash Plan is considered to be variable because the final benefit to employees depends on the Group's share price at the exercise date. Compensation expense is recorded at each balance sheet date by estimating the number of rights outstanding multiplied by the spread between the share price on the balance sheet date and the strike price. Reduction in compensation expense and the release of the accrual under the Appreciation plan was CHF 37 million for 2001. Compensation expense and the increase of the accrual under the Appreciation plan was CHF 77 million for 2000. This plan was supplemented in 2001 by the US ADS Incentive Plan.

The Leveraged Share Savings Program was first offered to selected executive officers and other employees in 2001. Employees can elect to receive all or part of their regular cash bonus in shares. The shares are blocked for a five year period at which time the bonus taken in shares are matched on a one-for-one basis. Compensation expense recognized under this plan was CHF 17 million for 2001.

The other Management Share Programs are considered to be compensatory based on the strike price for the underlying instruments, which is zero at the date of grant. Compensation expense is recorded at the grant date and is calculated as the number of instruments granted, multiplied by the share price on that date. Compensation expense recognized under these plans was CHF 12 million for the year ended December 31, 2001 (2000: CHF 8 million).

The total US GAAP expense of the above items is as follows:

	2001 CHF millions	**2000 CHF millions**
Option plan		11
Ownership plan	46	72
US ADS Incentive and ADS Appreciation Cash plans	-37	77
Leveraged Share Savings plan	17	
Other Management Share programs	12	8
Total US GAAP additional compensation expense	**38**	168

g) Consolidation of share-based compensation foundation: The Group has an employee share participation foundation that settles the obligations of the Group's share-based compensation plans that is not required to be consolidated for IAS. However, this foundation is consolidated under US GAAP.

The impact of consolidating this foundation is to reduce net income by CHF 37 million and CHF 21 million in 2001 and 2000, respectively. US GAAP equity at December 31, 2001 and 2000 decreases by CHF 939 million and CHF 753 million, respectively.

h) Deferred taxes: Under IAS 12 (revised) and US GAAP, unrealized profits resulting from intercompany transactions are eliminated from the carrying amount of assets, such as inventory. In accordance with IAS 12 (revised) 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 the tax effect to be calculated with reference to the local tax rate in the seller's or manufacturer's jurisdiction.

i) In-process research and development (IPR&D): IAS does not consider that IPR&D is an intangible asset that can be separated from goodwill. Under US GAAP it 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 2001 IPR&D has been identified for US GAAP purposes in connection with acquisitions, principally the acquisition of 21.3% of the voting shares of Roche and the acquisition of the pitavastatin marketing rights.

A fair value determination of Roche was used to determine the CHF 356 million of IPR&D which has been expensed immediately. The independent appraisers used an excess earnings model and relied upon publicly available information from equity analyst reports. An excess earnings model captures the future cash flows attributable to the asset.

Under US GAAP marketing rights, such as those acquired for pitavastatin where the underlying product has not received regulatory approval, are classified as IPR&D and require expensing immediately. This resulted in an additional US GAAP expense of CHF 506 million.

During 2000 IPR&D was identified for US GAAP purposes in connection with acquisitions, principally Wesley Jessen.

The technology acquired with Wesley Jessen consisted of two projects and five technologies to be used in research and development. The successful completion of the acquired research and development projects is subject to achieving technological feasibility for each technology acquired. Further work is required to achieve this feasibility which is dependent on completing certain tasks for the projects to be used in research and development. Management anticipates that the tasks will be completed between 2002 and 2003 and commercialization of the projects between 2002 and 2005.

The income approach was used to determine the value of the ongoing research and development projects and technologies that were acquired in the purchase. Under this approach the value of the technology was based upon the present value of future cash flows over 15 to 18 years using a risk-adjusted discount rate of 15%. Management has reviewed the approaches used to value these technologies and agreed that they appropriately reflected the value of the technologies to the ongoing research and development efforts.

IPR&D recognized on other acquisitions amounted to CHF 74 million in 2001. The total IPR&D expense for 2001 was CHF 936 million (2000: CHF 143 million).

j) Other: There are also differences between IAS and US GAAP in relation to (1) capitalized interest and capitalized software, (2) accretion on convertible debentures, and (3) LIFO inventory. None of these differences are individually significant and they are therefore shown as a combined total.

k) Additional US GAAP disclosures:

1) Financial assets and liabilities

Apart from the following exceptions, the US GAAP carrying value of financial assets and liabilities is equal to the IAS carrying values.

2) Cash, cash equivalents and time deposits

	2001 CHF millions	2000 CHF millions
Carrying value of cash and cash equivalents under IAS	11 147	8 803

	2001 CHF millions	2000 CHF millions
Carrying values of time deposits under IAS (note 10)	2 689	2 238
Change due to consolidation of share-based compensation foundation under US GAAP	-1 137	-935
Total under US GAAP	**12 699**	10 106

3) Marketable securities

	2001 CHF millions	2000 CHF millions
Carrying values of marketable securities under IAS (note 10)	8 008	9 482
Carrying values of other investments under IAS	1 755	982
Unrealized gains not recorded under IAS (notes 10 and 13)		2 113
Marketable securities in share-based compensation foundation consolidated under US GAAP	196	196
Total under US GAAP	**9 959**	12 773

The components of available-for-sale marketable securities under US GAAP at December 31, 2001 and 2000 are the following:

CHF millions	Cost	Gross unrealized gains	Gross unrealized losses	Carrying value and estimated fair value
As at December 31, 2001				
Available-for sale-securities:				
Equity securities	4 084	941	-458	4 567
Debt securities	5 430	70	-108	5 392
Total	**9 514**	**1 011**	**-566**	**9 959**
As at December 31, 2000				
Available-for-sale securities:				
Equity securities	4 297	2 068	-569	5 796
Debt securities	6 950	185	-158	6 977
Total	11 247	2 253	-727	12 773

Prior to the introduction of IAS 39 from January 1, 2001, under IAS, unrealized holding gains on available-for-sale securities were not recognized in the income statement. Gross unrealized holding losses on available-for-sale securities were recorded in the other financial expense component of financial income, net.

Under US GAAP for all years presented, unrealized holding gains and losses on available-for-sale securities are recorded as a component of other comprehensive income.

Proceeds from sales of available-for-sale securities were CHF 9 482 million and CHF 2 1007 million in 2001 and 2000, respectively. Gross realized gains were CHF 795 million and CHF 607 million on those sales in 2001 and 2000, respectively. Gross realized losses were CHF

170 million and CHF 291 million on those sales in 2001 and 2000, respectively. The cost used to determine the gain or loss on these sales was calculated using the weighted average method.

The maturities of the available-for-sale debt securities included above at December 31, 2001 are as follows:

	2001 CHF millions
Within one year	215
Over one year through five years	2 132
Over five years through ten years	1 924
Over ten years	1 121
Total	**5 392**

4) Derivative financial instruments: Prior to the adoption of IAS 39 from January 1, 2001, under IAS, the Group used the concept of portfolio valuation for derivative financial instruments. For each portfolio of similar instruments the net unrealized holding gain or loss was determined by netting unrealized holding gains and losses on each instrument in the portfolio. The Group's application of IAS 39 from January 1, 2001 is now consistent with US GAAP. Under US GAAP for all years presented, the Group marks all of its derivative financial instruments except those related to cash flow hedges, that do not qualify for hedge accounting, to fair value on an individual basis through the income statement and thus their carrying value is equal to their fair value. This produced the following differences between IAS and US GAAP for periods prior to the adoption of IAS 39 on January 1, 2001:

Realized and unrealized gains and losses on equity options designated as a hedge of available-for-sale securities were deferred in other comprehensive income until the underlying security was disposed of, at which time they were included with the related capital gain or loss.

When a hedging instrument expired or was sold, or when a hedge no longer met the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remained in equity and was recognized when the committed or forecasted transaction was ultimately recognized in the income statement or when the underlying available-for-sale security was disposed of. However, if a committed or forecasted transaction was no longer expected to occur, the cumulative gain or loss that was reported in equity was immediately transferred to the income statement.

From January 1, 2001, the Group adopted SFAS 133 "*Accounting for Derivative Instruments and Hedging Activities*" which as applied by the Group is consistent with IAS 39 as regards accounting for cash flow hedges.

Total losses recognized in 2001 in accordance with US GAAP on options settled in Novartis shares that require a net cash settlement were CHF 387 million (2000: CHF 278 million of gains).

5) Non-derivative financial instruments: The US GAAP carrying values are equivalent to the IAS carrying values for all non-derivative financial assets and liabilities, except for marketable securities at December 31, 2000 as described above.

Non-derivative financial assets consist of cash and cash equivalents, time deposits, and marketable securities. Nonderivative liabilities consist of commercial paper, bank or other short-term financial debts, and long-term debt.

The carrying amount of cash and cash equivalents, time deposits, commercial paper, and bank and other short-term financial debts approximates their estimated fair values due to the short-term nature of these instruments. The fair values of marketable securities are estimated based on listed market prices or broker or dealer price quotes. The fair value of long-term debt is estimated based on the current quoted market rates available for debt with similar terms and maturities.

The estimated fair values of the long and short-term financial debt are provided in notes 18 and 21 to the IAS consolidated financial statements.

6) Earnings per share: As discussed in item (g) above, in the past, the Group established a Novartis employee share participation foundation to assist the Group in meeting its obligations under various employee benefit plans and programs. This foundation supports existing, previously approved employee benefit plans.

For US GAAP purposes, the Group consolidates the Novartis employee share participation foundation. The cost of Novartis AG shares held by the foundation is shown as a reduction of shareholders' equity in the Group's balance sheet.

Any dividend transactions between the Group and the foundation are eliminated, and the difference between the fair value of the shares on the date of contribution to the foundation and the fair values of the shares at December 31, is included in consolidated retained earnings. Shares held in the foundation are not considered outstanding in the computation of US GAAP earnings per share.

The consolidation of this entity had the following impact on basic and diluted earnings per share:

	2001	2000
Net income attributable to shareholders under US GAAP (CHF millions)	4 703	6 913
Weighted average number of shares in issue under IAS	2 571 673 365	2 613 547 597
Weighted average number of treasury shares due to consolidation of the employee share participation foundation under US GAAP	-100 569 059	-93 783 600
Weighted average number of shares in issue under US GAAP	2 471 104 306	2 519 763 997
Basic earnings per share under US GAAP (expressed in CHF)	**1.90**	2.74

	2001	2000
Net income attributable to shareholders under US GAAP (CHF millions)	4 703	6 913
Elimination of interest expense on convertible debt (net of tax effect)	20	20
Net income used to determine diluted earnings per share	**4 723**	6 933
Weighted average number of shares in issue under IAS	2 571 673 365	2 613 547 597
Adjustment for assumed conversion of convertible debt	9 478 158	8 838 879
Call options on Novartis shares	4 574 401	
Adjustment for other dilutive share options	1 010 963	982 560
Weighted average number of treasury shares due to consolidation of the employee share participation foundation under US GAAP	-100 569 059	-93 783 600
Weighted average number of shares for diluted earnings per share under US GAAP	**2 486 167 828**	2 529 585 436
Diluted earnings per share under US GAAP (expressed in CHF)	**1.90**	2.74

7) Pro forma earnings per share: Statement of Financial Accounting Standards No. 123 "Accounting for Stock-Based Compensation" established accounting and disclosure requirements using a fair-value based method of accounting for share-based employee compensation. Had the Group accounted for share options in accordance with SFAS 123, net income and earnings per share would have been the pro forma amounts indicated below:

	2001	2000
Net income under US GAAP (CHF millions):		
As reported	4 703	6 913
Pro forma	4 664	6 884
Earnings per share (CHF):		
As reported:		
Basic	1.90	2.74
Diluted	1.90	2.74
Pro forma:		
Basic	1.89	2.73
Diluted	1.88	2.73

The weighted average assumptions used in determining the fair value of option grants were as follows:

	2001	2000
Dividend yield	1.2%	1.3%
Expected volatility	24.0%	24.0%
Risk-free interest rate	4.0%	4.0%
Expected life	9 yrs	10 yrs

These pro forma effects may not be representative of future amounts since the estimated fair value of share options on the date of grant is amortized to expense over the vesting period and additional options may be granted in future years.

8) Deferred tax: The deferred tax asset less valuation allowance at December 31, 2001 and 2000 comprises CHF 2 206 million and CHF 2 221 million of current assets and CHF 1 029 million and CHF 1 044 million of non-current assets, respectively. The deferred tax liability at December 31, 2001 and 2000 comprises CHF 823 million and CHF 786 million of current liabilities and CHF 3 062 million and CHF 2 702 million of non-current liabilities respectively.

9) Employee benefit plans: The disclosures required by US GAAP are different from those provided under IAS. The following provides a reconciliation of benefit obligations, plan assets and funded status of the plans.

	Pension benefits		Other post-employment benefits	
	2001 CHF millions	2000 CHF millions	2001 CHF millions	2000 CHF millions
Plan assets at fair value				
January 1	25 426	25 454		
Actual return on plan assets	-737	2 949		
Foreign currency translation	49	-18		

	Pension benefits		Other post-employment benefits	
Employer contributions	109	73		
Employee contributions	33	39		
Plan amendments	-361			
Settlement Agribusiness		-1 851		
Benefit payments	-1 158	-1 220		
Plan assets at December 31	23 361	25 426		
Benefit obligation				
January 1	17 662	21 304	660	655
Service cost	359	467	15	11
Interest cost	825	857	52	48
Actuarial (gain) loss	1 379	-1 759	169	-21
Plan amendments	-437		-2	-1
Settlement Agribusiness		-1 909		
Foreign currency translation	-14	-78	15	17
Benefit payments	-1 158	-1 220	-63	-49
December 31	18 616	17 662	846	660
Funded status	4 745	7 764	-846	-660
Unrecognized actuarial (gain) loss	632	-2 672	-58	-160
December 31 Prepaid (accrued) benefit costs	**5 377**	5 092	**-904**	-820
Prepaid benefit costs	6 469	5 783		
Accrued benefit liability	-1 092	-691	-904	-820
December 31 Net amount recognized in the balance sheet	**5 377**	5 092	**-904**	-820
Benefit cost				
Service cost	359	467	15	11
Interest cost	825	857	52	48
Expected return on plan assets	-1 517	-1 583		
Employee contributions	-33	-39		
Amortization of transition (asset)		-88		
Amortization of actuarial (gain) loss	258	28	78	-15
Net periodic benefit (income) cost	**-108**	-358	**145**	44
Weighted-average assumptions as at December 31	**%**	**%**	**%**	**%**
Discount rate	4.6	4.5	7.5	7.7
Rate of payroll indexation	2.8	2.8		
Expected return on plan assets	6.1	6.2		

In 2001 the Group recorded CHF 108 million of settlement gains associated with Group restructurings. In 2000 a net gain of CHF 52 million was recorded directly in shareholders' equity based on the settlement of its defined benefit pension plans attributable to Novartis Agribusiness.

The assumed health care cost trend rate at December 31, 2001 was 9.0% for those under age 65 and 9.0% for those over age 65, decreasing to 4.75% in 2006 and thereafter for both groups. The assumed health care cost trend rate at December 31, 2000 was 6.0% for those under age 65 and 6.0% for those over age 65, decreasing to 4.75% in 2006 and thereafter for both groups.

A one-percentage-point change in the assumed health care cost trend rates compared to those used for 2001 would have the following effects:

(CHF millions)	1% point increase	1% point decrease
Effects on total of service and interest cost components	10	-8
Effect on post-employment benefit obligations	98	-85

10) Comprehensive income: SFAS No. 130 *"Reporting Comprehensive Income"* established standards for the reporting and display of comprehensive income and its components. Comprehensive income includes net income and all changes in equity during a period that arise from non-owner sources, such as foreign currency items and unrealized gains and losses on securities available-for-sale. The additional disclosures required under US GAAP are as follows:

	2001 CHF millions	2000 CHF millions
Net income under US GAAP	4 703	6 913
Other comprehensive income:		
Foreign currency translation adjustment	-275	-525
Unrealized market value adjustment on available-for-sale securities (net of taxes of CHF 169 million and CHF 227 million, respectively)	-1 010	1 137
Reclassification adjustment:		
Net realized gains on sales of securities (net of taxes of CHF -61 million and CHF 36 million, respectively)	564	-280
Comprehensive income under US GAAP	**3 982**	7 245

11) Foreign currency translation: The Group has accounted for operations in highly inflationary economies in accordance with IAS 21 (revised) and IAS 29. The accounting under IAS 21 (revised) and IAS 29 complies with Item 18 of Form 20-F and is different from that required by US GAAP.

12) Effect of New Accounting Pronouncements: International Accounting Standards: The Group considers that there are no issued but not yet implemented IAS standards that will have a material effect on the Group's consolidated financial statements.

13) Effect of New Accounting Pronouncements: US GAAP: Statement of Financial Accounting Standards SFAS No. 141 on *"Business Combinations"*; SFAS 142 on *"Goodwill and other Intangible Assets"*; SFAS 143 on *"Accounting for Asset Retirement Obligations"* and SFAS 144 on the *"Accounting for Impairment or Disposal of Long-Lived Assets"* will be effective for periods beginning on or after January 1, 2002. The Group has not determined what, if any, effect these new standards will have on its consolidated financial statements.

Report of the Auditors on the Novartis Group Consolidated Financial Statements

To the General Meeting of Novartis AG, Basel

As auditors of the Group, we have audited the consolidated financial statements (balance sheet, income statement, cash flow statement, statement of changes in equity and notes) of the Novartis Group for the year ended December 31, 2001.

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.

Our audit was conducted in accordance with auditing standards promulgated by the Swiss profession and with International Standards on Auditing issued by the International Federation of Accountants (IFAC), which require that an audit be planned and performed to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement. We have examined on a test basis evidence supporting the amounts and disclosures in the consolidated financial statements. We have also assessed the accounting principles used, significant estimates made and 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 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with International Accounting Standards (IAS) and comply with Swiss law.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers AG

/s/ S.A.J. BACHMANN

S.A.J. Bachmann

/s/ J.P. HERRON

J.P. Herron

Basel, January 31, 2002

FINANCIAL STATEMENTS OF NOVARTIS AG

Income Statements

(for the years ended December 31, 2001 and 2000)

	2001 CHF millions	2000 CHF millions
Income		
Income from financial assets	3 215	2 393
Income from marketable securities, cash and short-term deposits	287	547
Gain from divestment of subsidiaries	22	29
Gain from disposal of intangible assets	313	
License fees from subsidiaries	332	374
Other income	1	10
Total income	**4 170**	3 353
Expenses		
Financial expenses	-101	-117
Administrative expenses	-3	-3
Changes to provisions and value of financial assets	-18	-21
Other expenses	-2	-10
Taxes	-111	-59
Total expenses	**-235**	-210

	2001 CHF millions	2000 CHF millions
NET INCOME	**3 935**	3 143

Proposal for the Appropriation of Available Earnings

	2001 CHF	2000 CHF
Available unappropriated earnings		
Balance brought forward		4 361 930 835
Waived dividend on treasury shares	56 441 360	31 648 448
Distribution of dividend-in-kind to form Syngenta AG		-861 774 957
Exercise of purchase rights in connection with the formation of Syngenta AG		686 606 590
Transfer to free reserves		-4 218 410 916
Net income of the year	3 934 800 324	3 143 153 882
Total available earnings	**3 991 241 684**	3 143 153 882
Appropriation		
Payment of a dividend of CHF 0.90 (2000: CHF 0.85) gross on 2 619 690 320 (2000: 2 778 136 680) dividend bearing shares with a nominal value of CHF 0.50 each	-2 357 721 288	-2 361 416 178
Transfer to free reserves	-1 633 520 396	-781 737 704
Balance to be carried forward		

Balance Sheets (prior to profit appropriation)

(at December 31, 2001 and 2000)

	Notes	2001 CHF millions	2000 CHF millions
ASSETS			
Financial assets	3	12 519	12 529
Total long-term assets		**12 519**	12 529
Current assets			
Receivables from			
subsidiaries		1 037	2 283
others		125	372
Accrued income and other current assets			2
Marketable securities	4	4 739	1 423
Cash and short-term deposits		4	16
Total current assets		5 905	4 096
TOTAL ASSETS		**18 424**	16 625
EQUITY AND LIABILITIES			

	Notes	2001 CHF millions	2000 CHF millions
Equity			
Total share capital	5	1 443	1 443
Reserves			
Legal reserves	6		
General reserve		289	289
Reserve for treasury shares		8 568	4 586
Free reserves	7	3 122	6 322
Total reserves		11 979	11 197
Unappropriated earnings			
Balance brought forward due to waived dividends on treasury shares		56	
Net income of the year		3 935	3 143
Total unappropriated earnings		3 991	3 143
Total equity		17 413	15 783
Liabilities			
Provisions		729	620
Accounts payable and accrued liabilities			
subsidiaries		63	62
others		219	160
Total liabilities		1 011	842
TOTAL EQUITY AND LIABILITIES		**18 424**	16 625

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 (CO).

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.

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 9 972 million (2000: CHF 9 966 million) of investments in subsidiaries and CHF 2 547 million (2000: CHF 2 563 million) of loans to subsidiaries and other related entities. The principal direct and indirect subsidiaries, joint ventures and other holdings of Novartis AG are shown on pages 131 and 132.

4. Marketable securities

Included in marketable securities are treasury shares with a net book value of CHF 4 703 million (2000: CHF 815 million) (see 5 and 6 below).

5. Share capital

	Number of shares					
	Jan 1, 2000	**Movement in year**	**Dec 31, 2000**	**Dec 31, 2000 restated after share split**	**Movement in year**	**Dec 31, 2001**
Total Novartis AG shares	72 130 117		72 130 117	2 885 204 680		2 885 204 680
Treasury shares						
Treasury shares held by Novartis AG	3 465 719	-170 019	3 295 700	131 828 000	59 154 300	190 982 300
Treasury shares held by subsidiaries	1 110 785	670 007	1 780 792	71 231 680	1 400 000	72 631 680
Total treasury shares	4 576 504	499 988	5 076 492	203 059 680	60 554 300	**263 613 980**
		CHF			**CHF**	
Average sale price per share		69				
Average purchase price per share		69			66	

In accordance with the decision of the Annual General Meeting of March 22, 2001, each registered share was divided into 40 identical registered shares and thereby their nominal value was reduced from CHF 20.00 each to CHF 0.50 each. The total share capital remains CHF 1 442.6 million.

The number of treasury shares held by the Company and subsidiaries meet the definitions and requirements of Art. 659b CO.

The 263 613 980 treasury shares held at December 31, 2001 and a further 1 900 380 shares acquired up to January 31, 2002, totaling 265 514 360 shares, are non-dividend bearing.

Novartis Group's consolidated financial statements comply with IAS SIC Interpretation No. 12. This requires consolidation of entities which do not qualify as subsidiaries in the sense of Article 659b CO.

6. Legal reserves

General reserves	2001 CHF millions	2000 CHF millions
January 1	289	4 179
Transfer to free reserves		-3 890
December 31	**289**	289

Reserve for treasury shares held by the Group	2001 CHF millions	2000 CHF millions
January 1	4 586	2 800
Transfer from free reserves	3 982	1 786
December 31	**8 568**	4 586

This reserve arises from premiums paid by shareholders and, in the past, Participation Certificate holders, in connection with capital increases, selling of treasury shares or the exercise of equity option rights and also from amounts allocated from the available earnings. In accordance with the decision of the October 11, 2000 extraordinary general meeting of shareholders this amount was reduced to represent 20% of the share capital of the Company which is the minimum required by Swiss law.

Novartis AG has met the legal requirements for legal reserves under Articles 659 et. seq. and 663b.10 CO for treasury shares detailed in note 5.

7. Free reserves

	2001 CHF millions	2000 CHF millions
January 1	6 322	
Transfer from general legal reserves		3 890
Transfer from unappropriated earnings	782	4 218
Transfer to reserve for treasury shares	-3 982	-1 786
December 31	**3 122**	6 322

8. Contingent liabilities

	Outstanding liabilities Dec 31, 2001	Outstanding liabilities Dec 31, 2000
Guarantees to cover capital and interest of bonds, commercial paper and the Euro medium-term note program total maximum amount CHF 7 037 million (2000: CHF 5 675 million)	4 451	2 396
Guarantees in connection with options on Novartis AG shares[1] total maximum amount CHF 4 088 million	4 088	
Guarantees in favor of group companies, associated companies and others total maximum amount CHF 1 950 million (2000: CHF 984 million)	1 289	467
Total	**9 828**	2 863

[1] Represents the amounts that Novartis AG has guaranteed in respect of subsidiary obligations regarding the 55 million call options (Low Exercise Price Options LEPOs) and 55 million put options issued on its shares.

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, 2001	% holding of share capital December 31, 2000
Emasan AG, Basel	3.8	3.8
Novartis Foundation for Employee Participation, Basel	3.5	3.2
Swiss Life Insurance and Pension Company, Zurich	1.0	2.1

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) of Novartis AG, Basel, for the year ended December 31, 2001.

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 auditing standards promulgated by the Swiss profession, 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

S.A.J. Bachmann H. Plozza

Basel, January 31, 2002

Due Dates for 2002 Reporting

Anticipated key reporting dates	
Annual General Meeting for the financial year 2001	March 21, 2002
First Quarter 2002 (sales and results)	April 18, 2002
First Half 2002 (sales and results)	July 22, 2002
Third Quarter 2002 (sales and results)	October 17, 2002
Full Year 2002 (sales and results)	January 2003

Contact Addresses

For further information regarding Novartis please contact:

Novartis International AG
Novartis Communications
CH-4002 Basel
Switzerland

Investor relations
Karen Huebscher
Tel: +41 61 324 8433
Fax: +41 61 324 8444

Communication products and services
Klaus Böcker
Tel: +41 61 324 2578
Fax: +41 61 324 2744

For USA investors
Kamran Tavangar
Tel: +1 212 830 2433
Fax: +1 212 830 2405

For ordering publications
Novartis Communications Helpline
Tel: +41 61 324 8000
Fax: +41 61 321 0985

Share registry
Kurt Hoein
Tel: +41 61 324 4415
Fax: +41 61 324 3244

General enquiries
Tel: +41 61 324 1111
Fax: +41 61 324 8001

Novartis on the Internet
http://www.novartis.com

Media enquiries
Felix Rãber
Tel: +41 61 324 2200
Fax: +41 61 324 3300

Novartis Annual Report on the Internet
http://www.novartis.com/annualreport2001

FORWARD-LOOKING STATEMENT DISCLAIMER

This Annual Report contains certain "forward-looking statements" within the meaning of the Securities Act of 1933 and the Securities Exchange Act of 1934 of the United States. These forward looking statements relate to our business and the sectors in which we and our subsidiaries and interests operate. Many of these statements can be identified by the use of forward-looking terminology such as "believe", "expect", "may", "are expected to", "will", "will continue", "should", "would be", "seek" or "anticipate" or similar expressions, or by discussions of strategy, plans or intentions. These statements include descriptions of our investment and research and development programs, descriptions of new products we expect to introduce and anticipated customer demand for our products. The forward-looking statements made in this Report reflect our current views with respect to future events and are subject to certain risks, uncertainties and

assumptions. Many factors could cause our actual results, performance or achievements to be materially different from any future results, performances or achievements that may be expressed or implied by these statements. Some of these factors include inability to discover and register new products, competition in general, loss of patent protection, price controls, product liability claims, exposure to environmental liabilities, interruption of supply and foreign exchange risks. For a more detailed description of the risks facing our Company, we encourage you to review the Form 20-F filed with the United States 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 Report as anticipated, believed, estimated or expected. We do not intend, and do not assume any obligation, to update any industry information or forward-looking statements set out in this Annual Report.

Our Annual Report is originally published in English, with French and German versions available.

Published by Novartis, Basel, Switzerland.

Project management by Com.factory, Basel, Switzerland.

Design by Cornelia Reinhard, London, England.

Printed by Merrill Corporation, USA.