
Annual Report 2002
Caring and Curing
NOVARTIS

...molecules for medicines... Martin Klumpp, PhD, Lukas Leder, PhD, and Aline Tirat, Novartis Lead Discovery Center, Basel, Switzerland

Contents

Front cover: Svenja, a young eczema patient during an examination at the Center for Dermatology, University of Frankfurt am Main, Germany.
Back cover: Svenja with her brother, Jan Patrick in the pediatric ward.

Financial Highlights

Sales CHF millions

2002	32 412
2001	31 643
2000[1]	29 112

Free cash flow[2] CHF millions

2002	4 463
2001	4 073
2000[1]	3 254

Operating income CHF millions

2002	7 887
2001	7 277
2000[1]	6 727

Research and development CHF millions

2002	4 339
2001	4 189
2000[1]	4 011

Net income CHF millions

2002	7 313
2001	7 024
2000[1]	6 511

Employees at year end

2002	72 877
2001	71 116
2000[1]	67 653

[1] Excluding discontinued Novartis Agribusiness
[2] Before acquisition of product and marketing rights and Roche Holding AG voting shares

Key ratios

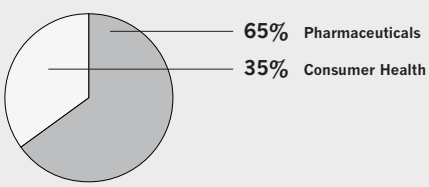
	2002	2001
Return on sales (%)	24.3	23.0
Return on average equity (%)	17.9	17.8
Group research and development as % of sales	13.4	13.2
Debt/equity ratio	0.20:1	0.21:1
Current ratio	2.5:1	2.4:1

Share information

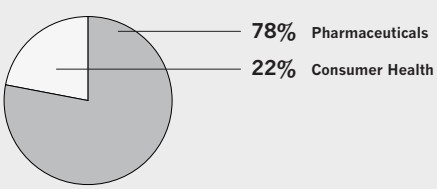
	2002	2001
Average number of shares outstanding	2 515 311 685	2 571 673 365
Earnings per share (CHF)	2.91	2.73
Operating cash flow per share (CHF)	3.24	2.85
Dividend per share[3] (CHF)	0.95	0.90
Pay-out ratio based on outstanding shares (%)	33	33
Share price at end of year (CHF)	50.45	60.00

[3] 2002: Proposal to the shareholders' meeting

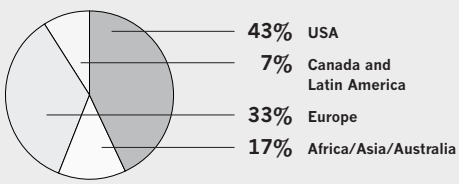
Sales by division



Operating income by division



Sales by region



News in 2002

- Strong volume growth in Pharmaceuticals and Generics: **Group sales up 11%** in local currencies (+2% in CHF)
- **Pharmaceuticals steadily gaining market share** in all major markets, with sales growth of 13% in local currencies (+4% in CHF), driven by the Cardiovascular and Oncology franchises
- Registration dossiers for **18 new drugs, indications and formulations** were submitted
- Group **operating income climbs 8%,** spurred by strong top line growth and enhanced productivity
- **Net income up 4%,** due to strong operating performance and an attractive level of financial income amid adverse market conditions
- Earnings per share rise 7%, supported by **share buy-back program**
- Based on solid performance, a **dividend increase of 6% to CHF 0.95 per share will be proposed** to shareholders

...searching for clues...

Mekala Siriwardina, Microscopist, Malaria ward, Polonnaruwa General Hospital, Sri Lanka

Letter from Daniel Vasella

Daniel Vasella, MD, Chairman and CEO

Dear Shareowner

In these times of economic uncertainty and volatility, it gives me pleasure to present another year of record results and consistent growth – the sixth year since Novartis was formed from the merger of Ciba and Sandoz in 1996.

Let me summarize the key achievements which contributed to our success in 2002:

- Double-digit growth was achieved in group sales, which totaled CHF 32.4 billion (+11% in local currencies).
- Operating income was up 8% to CHF 7.9 billion, net income rose 4% to CHF 7.3 billion, and earnings per share increased by 7% to CHF 2.91.
- Gains in market share were achieved by virtually all of our business franchises.
- 11 approvals were obtained for new pharmaceutical products, indications and formulations in major markets around the world, marking another industry-leading achievement.
- 18 registration dossiers for new drugs and indications were submitted for regulatory approval.
- In the US, pharmaceutical sales grew by 12%, making Novartis one of the fastest-growing major pharmaceutical companies. Altogether, the US market accounted for 42% of our global pharmaceutical business sales.
- Our oncology (+28%) and cardiovascular (+40%) businesses were successfully expanded, with significant rejuvenation of our product portfolio.
- The Consumer Health Division was refocused, with the establishment of global business units and the sale of Ovaltine/Ovomaltine, Caotina and Lacovo to Associated British Foods.
- Our Generics business was strengthened by the acquisition of the Slovenian generics company Lek.
- Net financial income reached CHF 949 million despite the difficult stock market conditions.
- Our financial investment in Roche was increased to 32.7% of the voting shares.
- We expanded our programs designed to facilitate the supply of drugs to indigent patients suffering from leprosy, malaria, tuberculosis and chronic myeloid leukemia (CML).

These good results are the fruits of a shared focus on clear, unchanged strategic goals and of the positive attitude and high level of commitment of our associates. I would like to take this opportunity to express my sincere thanks to all those who contributed to this year's success.

Similarly, in the year ahead we will continue pursuing a strategy oriented towards sustainable growth. Strategic focus, the capacity for innovation, successful marketing and enhanced productivity remain key success factors. In addition to the quality of our staff and products, the size and strength of our pharmaceutical business, particularly in the US market, is of crucial importance. The focus on these priorities led, among other criteria, to the decision last year to divest our Health & Functional Food operations. Part of this business, as mentioned above, has been sold to Associated British Foods, and

the remainder will be disposed of once an attractive bid is received. At the same time, we have further strengthened our Generics business, which also achieved dynamic organic growth, by acquiring the Slovenian company Lek. The latter's strong position in Central and Eastern Europe and its attractive product portfolio will enable the Generics Business Unit – to be rebranded under the established Sandoz name – to become a global market leader. Given the growing numbers of elderly patients requiring healthcare services and drugs, the role of low-cost generics will become even more important in future. The savings achieved as a result can then be used to finance innovative new drugs with improved efficacy and safety profiles benefitting the patient.

Innovation and new products will thus remain our company's lifeblood. For this reason, we have decided to set up a new research headquarters in Cambridge, Massachusetts, under the direction of our new Global Head of Research, Professor Mark Fishman. As President of the new institute, Professor Fishman plans to incorporate new insights from the fields of genetics and molecular biology into our research in a systematic manner and to draw on the rich pool of young scientists from the local network of universities and hospitals in and around Boston. This research initiative will involve substantial levels of investment, which will have an appreciable impact in the coming year. However, in view of our strategy of innovation and our long-term growth aspirations, we believe that these investments are justified and that they will result in important new medicines for patients in the years ahead.

In 2002, we further expanded our share in various segments of the US market and successfully launched two new drugs. After a regulatory setback in 2001, *Zelnorm/Zelmac* was approved earlier than expected by the FDA for patients with constipation-related irritable bowel syndrome and is now available in many countries. *Elidel*, a non-steroid cream for the treatment of atopic dermatitis, became the leading product in its segment only a few months after its introduction. The antihypertensives *Diovan* and *Lotrel* and the anticancer agents *Zometa* and *Gleevec/Glivec* continue to grow dynamically. *Gleevec/Glivec*, our breakthrough drug, received approval as first-line therapy for chronic myeloid leukemia (CML) in several markets, enabling patients to receive treatment immediately upon the diagnosis of their disease, improving their chances of survival and providing new hope for patients and families.

However, as expenditures on sales and marketing remain at a high level, it is not surprising that cost pressures will persist into the future. As far as possible, these will be counteracted through productivity programs, since it is rarely possible to increase prices. On the contrary, governments and insurers are constantly calling for price reductions and discounts. At the same time, certain developing countries and groups of activists are seeking to systematically undermine intellectual property rights. If the World Trade Organization were to yield

rashly to this pressure, the long-term result would be a continuous decline in investments in R&D, as there would be little prospect of achieving a reasonable return for our shareholders. Our position is one of unequivocal support for patents that are strong but apply only for a limited period. At the same time, we advocate that these patents should not be applicable for the 49 poorest countries with regard to life-saving drugs used to treat diseases such as AIDS, malaria and tuberculosis. We also continue to support the World Health Organization (WHO) by donating drugs for leprosy and tuberculosis and by supplying our innovative antimalarial agent *Coartem* at cost. It should be mentioned, too, that our new institute, The Novartis Institute for Tropical Diseases, dedicated to research on tropical diseases, will be opening in Singapore early in 2003. While we are aware that a lack of medicines is only one of the problems afflicting many developing countries, we trust that our efforts can make a substantial contribution to improving healthcare in these regions. In industrialized nations, we have also launched a number of programs for the benefit of uninsured and needy patients (for a summary, see p. 38).

Unfortunately, the past year will also be remembered as one of corporate scandals, challenging the credibility and integrity of many executives. Novartis did constantly strengthen its Corporate Governance in the past and will comply with new Swiss and foreign legislation and regulations but more importantly aspire to match the absolute highest standards. This commitment to progressive corporate governance structure and processes will lead to an increase in the responsibilities and tasks of the Board of Directors and its committees – especially in the case of the Audit and Compliance Committee.

This Annual Report fully responds to the widespread calls for greater transparency. It should enable you to form a realistic assessment of your company's current financial position and future growth prospects. This is the last Annual Report in which our results will be reported in Swiss francs. Because an ever-increasing proportion of our revenues are generated in the dollar zone, we have decided to present our future financial reporting in the US currency. This will also facilitate fairer comparisons with our – predominantly American – competitors, and I trust that these comparisons will further our recognition as a leading global pharmaceutical company dedicated to the discovery of innovative medicines for patients.

To you, our shareowners, I wish to express my gratitude for your loyalty and confidence.

Sincerely,

Daniel Vasella, MD
Chairman and CEO

"something incredible happened" Barbara Howell, San Diego, USA

Amazing Patient Stories

by Lisa Melton, PhD

... found the diagnosis hard to believe ... Gerd Goldhammer at Virchow Clinics, Berlin

Patients' Perspectives: Barbara Howell

Barbara should have died a long time ago. In 1998, the 53-year-old businesswoman from San Diego was lying immobile in a hospital bed, her bones packed with tumors – too many to even count. She was suffering from breast cancer that had spread to the bones. Her arms, legs, spine and skull were obliterated by cancer cells and the bone was crumbling. "I had tumors everywhere," she recalls. "My condition was so serious that my husband contacted our son asking him to come home because he may not have another chance." But drugs saved Barbara's life. "Something incredible happened, I started getting better. I wouldn't believe this story if somebody told me, except that I lived through it," she says.

Barbara's first brush with cancer came as a young woman. At 36, she had a breast tumor removed and for more than a decade she was healthy, until new problems erupted. "It started with an ache, and from one moment to the next I could not pick up my arm, it just hung there," says Barbara. Within two days, she could no longer eat, walk or even sit up in bed. The cancer had spread to her bones and the pain was excruciating. "I only had a wafer-thin strip of bone left in my arm, my legs were also a mess and a tumor on my skull grew so fast you could actually watch it getting bigger." Barbara had emergency surgery to place rods in both her legs. Another grueling operation was planned to strengthen her spine with "chicken wire" because doctors feared it would buckle under the weight of her head.

Fortunately, Barbara never had to face such an ordeal. The drugs alone did the trick. In a double-pronged strategy, Barbara took *Aredia* (pamidronate sodium), a Novartis drug, to prevent her bones from breaking, and tamoxifen (from another company) to stop the cancer cells from growing. Within three months Barbara's recovery was spectacular. "To everyone's amazement, the bone grew back. The doctor had tears in his eyes. He admitted he had never seen anything like it before," she says. Today, she is back at work, walks three miles a day, enjoys hiking on weekends with her husband and tackles comfortably two flights of steps at home. "I'm doing much better than they ever imagined I would," she exults. "My life ex-pectancy at the time was six months, and here I am, five years later"

Yet nobody can predict how long Barbara's health will hold out. To improve her chances of a sustained recovery, she recently changed her bone medication to Novartis' newly released *Zometa*. The prospects are good. *Zometa* belongs to a family of drugs, the biphosphonates, that have long been used to prevent bone complications in cancer patients. But *Zometa* (zoledronic acid) is much more potent than any compound that has gone before. By developing a different molecule, Novartis' team of chemists produced a medication that offers a 6% lower risk of developing bone complications in some cancers than *Aredia.*

Even in healthy people, bone is constantly breaking down and being rebuilt. *Zometa* interferes with this natural cycle by stopping osteoclasts, the cells engaged in demolishing bone, allowing bone density to increase. Bone complications in cancer patients are very common. In fact, bone metastases occur in 65 to 75% of all advanced breast and prostate cancer patients and in up to 40% of all lung cancer patients. Since each year, worldwide, 1.2 million women are diagnosed with breast cancer alone, this new treatment has the potential to help millions of cancer patients suffering from debilitating and painful bone complications.

Gerd Goldhammer with Peter Reichardt, MD

...happy about the tablets that helped avoid further surgery...

Patients' Perspectives: Gerd Goldhammer

Three years ago, Gerd, a fleet manager from Eisleben, Germany, was shocked to discover that his constant abdominal cramps were caused by a large tumor. "I had never been ill in my entire life," says the 60-year-old man, who found the diagnosis hard to believe. But the tumor was as big as a fist and surgeons removed it, together with 35 cm of intestine. Unfortunately, 18 months later, the tumors returned, this time in the membrane that envelops the abdomen, the peritoneum. His prospects were bleak. Gerd was suffering from a lethal form of gastrointestinal cancer called gastrointestinal stromal tumor (GIST) that resists every form of therapy. Further surgery was planned to eradicate the new tumor, and Gerd had no option but to brave it.

Just then his luck changed. One of his doctors heard of *Gleevec/Glivec* (imatinib mesylate), a new cancer treatment by Novartis which was achieving some spectacular successes. The drug was being tested in a clinical trial in Berlin, and without hesitation Gerd packed his bags and drove 300 km to the hospital. Once there, instead of surgery, he was asked to take four capsules of *Gleevec/Glivec* a day. To his delight the tumor began to shrink, and he now hopes that his next scan will show it has become even smaller.

Gerd's recovery is nothing short of miraculous. Today he works full-time, feels fit, and the pains that once plagued him never returned. "I am so happy about the tablets that helped me avoid further surgery. Now my wife, daughter and I, are a happy family again," he enthuses.

And Gerd is not alone. *Gleevec/Glivec* has brought thousands of people back from the brink of death. "*Gleevec/Glivec* is a groundbreaking drug," enthuses Peter Reichardt, MD, the oncologist at the Virchow Clinics, Berlin, who conducted the trial and witnessed Gerd's response. "GIST patients went from having nothing to having an extremely active treatment. We see tumors melt away in only two or three months." In 70% of GIST patients the tumors shrivel, eventually to nothing. And although GIST is considered a rare form of cancer, with approximately 12 000 new cases worldwide each year, the impact is enormous. "Before, when we had a sarcoma patient, we always hoped it would not be GIST," Peter Reichardt, MD, admits. "Now we carefully re-examine the histology just to check whether it might be GIST because we can now offer an extremely active treatment. Things have changed a lot."

Novartis' breakthrough drug is at the cutting-edge of cancer treatment. *Gleevec/Glivec* is one of the first drugs to inhibit the growth of malignant cells while having a limited effect on healthy tissue, usually without the distressing hair loss, sickness and weakened immune system that accompany conventional cancer therapies.

Gleevec/Glivec was originally developed to treat a rare type of blood cancer called chronic myeloid leukemia (CML). Although the treatment was designed to be specific for CML, researchers soon realized that *Gleevec/Glivec* could also target tumor cells in GIST patients, and they are studying it as a potential treatment for other forms of cancer. In all, hundreds of thousands of lives could be transformed by this revolutionary drug.

Patients' Perspectives: Laura Brizar

Laura was only a baby when she joined the clinical trial for *Elidel* (pimecrolimus). "I could see how much she was suffering. She looked exhausted, she barely slept," recalls Diamant Thaci, MD. The seven-month-old child from a small town in central Germany was ill, not with a life-threatening disease, but with eczema. Yet her young life was in shambles. "The skin on her face, neck and behind her knees was red, dry and itchy. Despite putting gloves on her little hands, Laura could not stop scratching so her skin was broken and weepy. It looked awful. On the street, strangers

"the last resort" Laura with mother and Diamant Thaci, MD, Dermatological University Clinic, Frankfurt am Main, Germany

"remarkable recovery" Laura, back at home

would ask me what was wrong with her." Laura's mother rejected reverting to corticosteroids, the only previously effective treatment, because they can cause skin thinning, especially of the face, with prolonged use. None of the other treatments helped and Laura's mother was in despair.

Their visit to Dr. Thaci changed all that. The senior dermatologist at the Dermatological University Clinic in Frankfurt am Main, Germany, enrolled Laura in a clinical trial for the Novartis drug *Elidel*. "We used this wonder cream," says Laura's mother, "and after two weeks her condition had noticeably improved. After a month her skin had made a remarkable recovery. By her first birthday you could hardly see any marks at all." Dr. Thaci who has followed Laura's progress, is equally elated. "We were the last resort for the mother and the child. Every time the child came through the door, I was curious: had the situation improved? It was a joy to witness what happened," he says.

Elidel is derived from a natural substance produced by a fungus, Streptomyces hygroscopicus. It was discovered by scientists at the Novartis Research Institute in Vienna who were looking for a medicine that would prevent T-cells from churning out chemicals known as cytokines that trigger skin inflammation. *Elidel* reduces the severity of eczema by an average of 64% compared to a 12% reduction in patients using a control cream. More than 4 000 patients have now been treated with *Elidel* in clinical trials and the most frequently observed side effect is a mild feeling of warmth when the cream is applied. As eczema typically begins in childhood and commonly occurs on the face, no doubt physicians will welcome a non-steroid cream that can be used on any skin.

Making a Real Difference

New medicines such as *Gleevec/Glivec*, *Elidel* and *Zometa*, are making a real difference in the lives of millions of families living with disease. These outstanding medicines have provided the impetus for Novartis to make a huge and exciting investment into research and development. In 2003, a new institute for research, based in Cambridge, Massachusetts, will open under the name of the Novartis Institutes for Biomedical Research, Inc. (NIBRI). The aim is to strengthen Novartis' position as a leader in pharmaceutical innovation.

Researchers in laboratories across Europe, the US and Japan will be looking towards Cambridge to follow the leadership of top scientist Professor Mark Fishman who will be heading the global research effort of Novartis, at the new Cambridge site.

Professor Fishman is a physician, a Harvard medical school professor, and was chief of cardiology at Massachusetts General Hospital. He was responsible for transforming research in his field by introducing the zebra fish as a model organism for understanding new genes and pathways in cardiovascular disease. He has every intention of applying the same up-beat, revolutionary strategies to drug discovery (see interview, page 12).

"Our establishment, NIBRI in Cambridge, in the midst of one of the world's most impressive pools of scientific talent, outstanding academic institutions, and large patient populations, will help us to attract the best researchers," says Daniel Vasella, MD, Chairman and CEO of Novartis AG. The new research facility will open in March 2003 with an initial 28 000 m^2 of lab space which will accommodate 400 scientists. In April 2004, Novartis will take over an additional 56 000 m^2 of laboratories in a renovated building which abuts the MIT campus. When the institute is fully staffed, it is expected that almost 1 000 Novartis scientists will be working in Cambridge, complementing the 1 500 scientists who are now located in Basel. With an initial investment of USD 250 million, the focus will be on the discovery of new

drugs for oncology, diabetes, cardiovascular and infectious diseases, as well as for fundamental molecular and genetic studies that bring about a quantum leap in the pace and predictability of drug discovery.

To Professor Fishman, a key to success is to forge close partnerships between the institute, academia and the biotech community. For this, Cambridge provides the perfect environment. "The institute had to be strategically situated in an area where the best academic institutions and hospitals with large patient networks are located," he says.

Inspired by Success

While NIBRI gears up to open its doors, Barbara plans to attend her son's wedding and PhD graduation in a year's time, and Gerd's life is back to normal. Laura's mother is grateful that her toddler can finally sleep comfortably.

For a pharmaceutical company, it is being able to have an impact on people's lives through its discoveries that provides the impetus to produce more and better medicines. "One of the most motivating things that happens to us as scientists is to hear people's amazing stories," enthuses Alex Matter, MD, Global Head of Translational Research at Novartis. "People whose lives have improved are our best advocates."

Interview with Prof. Mark Fishman, MD

Is drug discovery in need of a radical shake up?

There remain many illnesses without effective therapy. As we unravel the genome and learn how to put function to the genes, we will generate a foundation for mechanistic explanation of disease and acquire many new potential targets for medicines. To give you an idea of how early we are in the process, all medicines from all companies today hit only about 120 targets. Since there are in the order of 30 000 genes and 200 000 proteins, many of which could be involved in illness, clearly we are missing great opportunities for discovery. The trick will be to decipher which genes are critical. This will be a long-term project, in part because different patients with the same illness may actually have different underlying causes because of genetic predisposition. In the future, medicines may well be directed by the patient's genetic make-up and more attuned to patient-specific mechanisms of disease. For this reason Novartis has elected to ensure that we engage in activities at the frontier, in order to be prepared for this sea-change.

Will the newly sequenced human genome feature heavily in the new institute's agenda?

Currently the genome is pretty much a list of genes by sequence. To increase the pace and predictability of discovery of new drugs we need to unravel the function of these genes. Of course, this is a mammoth task, with implications for all of science and medicine, and we cannot, and should not, go it alone. To do so, we need to form ventures and partnerships with our colleagues in academia and in biotech.

Will the marriage of pharma and academia pan out, or is it just pie in the sky?

The two already are engaged. Over the last years it has become clear that many academics would dearly like to make medicines, in some cases as a vindication for their fundamental work. The support from academia for the opening of NIBRI in Cambridge has been uniformly positive and strong precisely because many desire such involvement. There are real issues, of course, around intellectual property, for example, but in many cases we can break through these barriers by common sense and asking where lies the real value. It will benefit no one if the walls get higher and barriers more impregnable, least of all our patients who have the right to full benefit of the fundamental discoveries now coming forth at an ever-increasing pace.

What is your biggest challenge?

To assemble a system that delivers medicines continuously, keeping an eye on the horizon for the sweeping changes while, in a practical way, using each day's knowledge to generate drugs. Science is a moving target, and no assumptions today can be confidently predicted to hold in 5 years ... except that most of today's predictions will be wrong.

Are some traditional research methods flawed?

One major assumption that clearly needs to be challenged is that two patients with apparently the same disease, by today's definition – be it diabetes, heart failure, or leukemia – have the same cause for that disease, and therefore will benefit equally from the same drugs. We therefore will need better to attune drugs to individuals, in order to increase efficacy and decrease toxicity. In addition, we can utilize new model organisms in the discovery process. Much is shared, in terms of essential molecular pathways, the biological building blocks. For example, one pathway essential to making the fruitfly wing, when perturbed in humans, causes cancer. On the flip side, we need to recognize that in many ways man is different, and so need to examine how to change these model systems to make them better predictors of the human response to drugs.

What does the new Novartis Institutes for Biomedical Research Inc. (NIBRI) offer ordinary citizens?

The mission is to discover medicines at an increasing pace and with even greater specificity, to better treat those now suffering disease, and to improve the process so effectively over the coming years that our children look back with disbelief, surprised that such diseases ever were untreatable.

"joy to witness what has happened"

Laura with mother and grandmother, Dermatological University Clinic, Frankfurt am Main, Germany

Pharmaceuticals

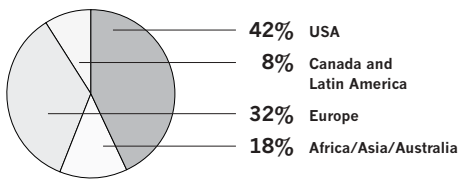
The Novartis Pharmaceuticals Division is a world leader in the discovery, development, manufacture and marketing of prescription medicines. Our goal is to provide a broad portfolio of innovative, effective and safe products and services to patients through healthcare professionals around the world. This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

	2002 CHF millions	2001 CHF millions	Change in CHF %
Sales	**21 002**	20 181	4
Operating income	**6 022**	5 677	6
Research and development	**3 580**	3 447	4
Research and development as % of sales	**17**	17	
Free cash flow[1]	**6 919**	6 663	4
Net operating assets	**11 287**	13 144	-14
Investments in tangible fixed assets	**785**	617	27

[1] Before acquisition of product and marketing rights

	2002	2001	% change
Number of employees	**44 110**	41 256	7

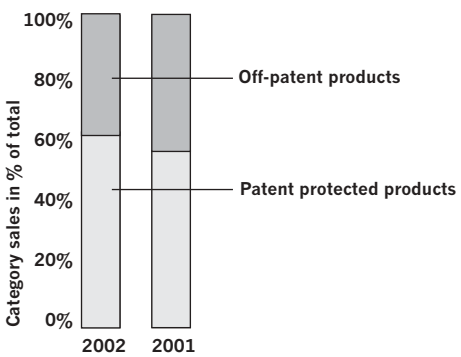
Sales by region



Top ten products	2002 sales in CHF millions	Change in local currencies %
Diovan/Co-Diovan	**2 580**	**49**
Neoral/Sandimmun	**1 607**	**-5**
Lamisil (group)	**1 355**	**4**
Lotrel	**1 011**	**35**
Gleevec/Glivec	**953**	**303**
Sandostatin (group)	**943**	**23**
Voltaren (group)	**925**	**-3**
Lescol	**896**	**18**
Zometa	**758**	**NA**
Cibacen/Lotensin/Cibadrex	**714**	**9**

NA – Not applicable as insignificant prior year sales

Pharmaceuticals portfolio rejuvenation



Key Marketed Products

Therapeutic area	Compound	Generic name	Indication	Formulation
Cardiovascular, metabolism and endocrinology	***Cibacen/Lotensin***	benazepril	Hypertension	Coated tablet
	Co-Diovan[1]	valsartan + HCT	Hypertension	Film-coated tablet
	Diovan	valsartan	Hypertension, heart failure	Capsule
	Lescol	fluvastatin	Cholesterol-lowering agent	Capsule
	Lotrel	benazepril & amlodipine	Hypertension	Capsule
	Starlix	nateglinide	Type-2 diabetes	Tablet
	Zelnorm/Zelmac	tegaserod maleate/ tegaserod	Symptomatic treatment of irritable bowel syndrome	Tablet
Oncology and hematology	***Aredia***	pamidronate	Bone complications associated with cancer	Intravenous infusion
	Femara	letrozole	Advanced breast cancer	Coated tablet
	Gleevec/Glivec	imatinib mesylate	Chronic myeloid leukemia	Capsule
	Sandostatin LAR	octreotide	Acromegaly, carcinoid syndrome	Ampoule i.m.
	Zometa	zoledronic acid	Hypercalcemia of malignancy	Infusion
Central nervous system	***Comtan***	entacapone	Parkinson's disease	Film-coated tablet
	Exelon	rivastigmine	Alzheimer's disease	Capsule
	Leponex/Clozaril	clozapine	Antipsychotic agent for treatment-resistant schizophrenia[4]	Tablet, ampoule i.m.
	Tegretol	carbamazepine	Epilepsy, acute and bipolar affective disorders	Tablet, chewable tablets, syrup, suppository
	Trileptal	oxcarbazepine	Epilepsy, seizures	Tablet, oral suspension
Transplantation	***Neoral/Sandimmun***	cyclosporine	Prophylaxis of organ rejection following kidney, liver and heart allogenic organ transplantation[2]	Soft gelatin capsule, oral solution, intravenous infusion
	Simulect	basiliximab	Prophylaxis of acute organ rejection in de novo renal transplantation	Intravenous infusion or injection
Dermatology	***Elidel***	pimecrolimus cream	Atopic dermatitis	1% cream
	Famvir	famciclovir	Acute herpes zoster	Tablet
	Lamisil	terbinafine	Fungal infections	Tablet, cream, DermGel solution, spray
Respiratory	***Foradil***	formoterol	Asthma, COPD	Inhalation capsule (aerosol)
Rheuma, bone and hormone replacement therapy	***Estalis***[3]	estradiol norethisterone	Estrogen deficiency due to menopause and preventing osteoporosis	Patch
	Estraderm TTS/MX	estradiol	Estrogen deficiency due to menopause	Patch
	Miacalcic	salmon calcitonin	Osteoporosis, regulator of mineral homeostasis and skeletal metabolism, Paget's disease of bone, neurodystrophic disorders	Nasal spray, ampoules
	Voltaren	diclofenac	Inflammatory forms of rheumatism, pain management	Enteric coated tablet, drop, ampoule, suppositories, gel
Ophthalmics	***Rescula***	unoprostone	Glaucoma	Eye drop
	Visudyne	verteporfin	Wet form of age-related macular degeneration	Intravenous infusion

1 *Co-Diovan/Diovan HCT* in the USA
2 In the US, *Neoral* approved for severe psoriasis and rheumatoid arthritis
3 *Vivelle, Vivelledot*
4 Also approved for suicide prevention in the US

Compounds in development
The Novartis pipeline holds a broad stream of promising future products, with 52 projects in Phase II and beyond as of December 2002, including both new molecular entities and additional indications or formulations for marketed products.

Compound
Molecular chemical entity.

Generic name
Designation assigned to compound.

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.

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

Therapeutic area	Project/compound	Generic name	Indication
Cardiovascular, metabolism, endocrinology	**SPP100**	–	Hypertension
	LAF237	–	Type-II diabetes
	Diovan	valsartan	Congestive heart failure
		valsartan	Post- and pre-myocardial infarction
	Navigator*	–	Progression to type-II diabetes
	Sandostatin LAR	octreotide acetate	Diabetic retinopathy, other indications
	Lotrel 5–40	–	Hypertension
	Lotrel 10–40	–	Hypertension
	NKS104	pitavastatin	Dyslipidemia
	Lescol (LIPS)	fluvastatin sodium	Secondary prevention of cardiac events
Oncology, hematology	***Femara***	letrozole	Breast cancer (adjuvant therapy)
	ICL670	–	Chronic iron overload
	Gleevec/Glivec	imatinib mesylate/imatinib	Solid tumors
	OctreoTher	edotreotide	Somatostatin receptor positive tumors
	EPO906	–	Solid tumors
	PTK787	vatalanib	Solid tumors
	PKC412	midostaurin	Acute myeloid leukemia
	SOM230	–	Acromegaly, GEP neuroendocrine tumors
Central nervous system	***Ritalin LA***	methylphenidate	Attention deficit disorders
	Clozaril **(InterSePT)**	clozapine	Prevention of suicidal behaviour
	ELC200	entacapone/levodopa/carbidopa	Parkinson's disease
	ILO522	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
		pimecrolimus	Inflammatory skin diseases
	Lamisil	terbinafine	Tinea capitis
Respiratory	***Foradil***	formoterol	Multi dose dry powder inhaler for asthma
	QAB149	–	Asthma/COPD[2]
	Xolair	omalizumab	Asthma/prevention of SAR[3]
	Elidel **(ASM981)**	pimecrolimus	Asthma
Arthritis, bone, anti-infectives, and gastrointestinal diseases	***Prexige***	lumiracoxib	Rheumatoid arthritis, osteoarthritis, pain
	Zelnorm/Zelmac	tegaserod maleate/tegaserod	Irritable bowel syndrome
		tegaserod maleate/tegaserod	Functional dyspepsia
		tegaserod maleate/tegaserod	Gastroesophagel reflux disease
		tegaserod maleate/tegaserod	Chronic constipation
	ZOL446	zoledronic acid	Post-menopausal osteoporosis
		zoledronic acid	Paget's disease
		zoledronic acid	Rheumatoid arthritis
	RAD001	everolimus	Rheumatoid arthritis
	AAE581	–	Osteoporosis
	SMC021	calcitonin	Osteoporosis
Ophthalmics	***Visudyne***	verteporfin	AMD[4] (occult)
		verteporfin	AMD[4] (classic)
		verteporfin	AMD[4] (minimally classic)
	Rescula	unoprostone isopropyl	Glaucoma

[1] Amyotrophic lateral sclerosis [2] Chronic obstructive pulmonary disease

Mechanism of action	Formulation	Filing dates	Phase I	Phase II	Phase III	Filed
Renin inhibitor	Oral	2005				
Dipeptidylpeptidase (DPP-IV) inhibitor	Oral	2005				
Angiotensin-II receptor blocker	Oral	Filed (EU)				
Angiotensin-II receptor blocker	Oral	2004				
	Oral	>2005				
Growth hormone + IGF-1 inhibitor	Intramuscular	2004				
	Oral	Filed (US)				
	Oral	Filed (US)				
HMG CoA reductase inhibitor	Oral	2005 (EU)				
HMG CoA reductase inhibitor	Oral	Filed				
Non-steroidal aromatase inhibitor	Oral	2005				
Iron chelator	Oral	2004				
Tyrosine kinase inhibitor	Oral	tbd				
Radiation therapy	Intravenous	2004				
Microtubule depolymerization inhibitor	Intravenous	2004				
Tyrosine kinase inhibitor	Oral	2005				
Protein kinase inhibition	Oral	>2005				
Binds to somatostatin (sst)1/2/3/5	Intravenous	>2005				
and inhibitor of hormones						
Dopamine transport blocker	Oral	Filed (EU)				
Dopamine receptor blocker	Oral	Filed (EU)				
Catecol-O-methyltransferase (COMT) inhibition	Oral	Filed				
Mixed 5HT2A/D2 antagonist	Oral	tbd				
Cholinesterase inhibitor	Oral	>2005				
Cholinesterase inhibitor	Transdermal	>2005				
Voltage dependant sodium currents blocker	Oral	2004				
Neuronal GAPDH dependent programmed	Oral	2005				
cell death inhibition						
AMPA receptor antagonist	Oral	>2005				
Immunosuppression	Oral	2005				
Growth-factor-induced cell proliferation inhibition	Oral	Filed				
Inhibition of inosine monophosphate	Oral	Filed (EU)				
dehydrogenase enzyme						
T-cell and mast cell inhibitor	Oral	2005				
T-cell and mast cell inhibitor	Ointment	2004				
Fungal squalene epoxidase inhibitor	Oral	2004				
Long-acting beta-2 agonist	Dry powder for inhalation	Filed				
Long-acting beta-2 agonist	Inhalation	>2005				
Anti-IgE monoclonal antibody	Subcutaneous	Filed (US)				
T-cell and mast cell inhibitor	Oral	>2005				
Cyclo-oxygenase-2 inhibitor	Oral	Filed				
5HT4-receptor agonist	Oral	2004 (EU)				
5HT4-receptor agonist	Oral	2004				
5HT4-receptor agonist	Oral	2005				
5HT4-receptor agonist	Oral	2003				
Bisphosphonate: osteoclast inhibitor	Intravenous	>2005				
Bisphosphonate: osteoclast inhibitor	Intravenous	2005				
Bisphosphonate: osteoclast inhibitor	Intravenous	>2005				
Growth-factor-induced cell proliferation inhibition	Oral	>2005				
Cathepsin K Inhibitor	Oral	>2005				
Regulator of calcium homeostasis	Oral	>2005				
Photosensitizer for photodynamic therapy	Intravenous	2005				
Photosensitizer for photodynamic therapy	Intravenous	Filed (Japan)				
Photosensitizer for photodynamic therapy	Intravenous	>2005				
Facilitates aqueous outflow	Topical	Filed (EU)				

[3] Seasonal allergic rhinitis [4] Age-related macular degeneration

The Novartis Pharmaceuticals Division achieved double-digit sales growth throughout 2002, to post full-year sales of CHF 21.0 billion, an increase of 13% in local currencies or 4% in Swiss francs. By comparison, the world pharmaceutical market grew around 8% over the same period.

The strong performance was driven by increased market share in all of the Division's major markets. The Cardiovascular and Oncology franchises sustained dynamic momentum, widely exceeding overall growth in their respective market segments. For the second consecutive year, Novartis was among the most successful companies in the industry regarding FDA approvals. 2002 saw the successful US and European launches of *Elidel*, an innovative non-steroidal cream for treating eczema, and *Zelnorm/Zelmac*, a treatment for constipation-prone irritable bowel syndrome (IBS) in women. *Zometa* gained US and EU approvals for treating bone metastases in a broad range of cancers. *Diovan*, our flagship drug for lowering blood pressure, won approval in the US for treatment of heart failure in patients intolerant of ACE inhibitors, making it the first and only drug in its class to be approved by the FDA for this application.

Based on impressive results in a clinical study of patients with early stage chronic myeloid leukemia (CML), *Gleevec/Glivec* received approval as first line therapy in the US and, early in 2003, in the EU. The FDA also approved *Gleevec* as the first drug for the treatment of GIST, a rare type of stomach tumor, in patients for whom surgery is not an option.

The new products and additional indications for recently launched products contributed to further rejuvenation of the portfolio. As a result, the proportion of sales generated by patented products rose 6 percentage points to 61%.

Marketing & Distribution investments increased to drive the US and EU launches of *Elidel* and *Zelnorm*. Implementation of the new research strategy and the establishment of the new Boston facility to power future innovation led to a 4% increase in Research & Development investments, which were maintained at 17% of sales.

Regionally, sales in the US, the biggest single market, rose 12% to CHF 8.9 billion. The US now accounts for 42% of Pharmaceuticals' sales, up nine percentage points over the past five years. *Elidel* became America's number-one branded product in treatment of atopic dermatitis, or eczema, with more than double the share of new prescriptions of its closest rival. Furthermore, the US field force considerably improved its rankings in the Scott-Levine surveys, a highly regarded independent annual measure of customer satisfaction.

Double-digit sales growth was achieved in all major regions, with Latin America (17%) and Japan (15%) leading the way, despite government mandated price decreases. In Europe, strong performances in Spain and France offset the effects of pricing pressures in several countries, mandatory generic substitution in Germany, and the effects of parallel imports both in Germany and the UK.

Business Unit Product Reviews

Primary Care

Primary Care continued to surpass industry growth, as 2002 sales climbed 13% in local currencies. Primary Care includes a wide range of products for the treatment of cardiovascular diseases, central nervous system disorders and dermatological conditions (including fungal infections, eczema, psoriasis and genital herpes).

In 2002, *Diovan/Co-Diovan* (valsartan/valsartan+HCT) extended its category leadership in the US and became Novartis' best selling product ever, with sales growing 49% in local currencies. Backed by the Val-Heft study data showing improved survival in certain patient treatment groups and reduced hospitalization and cost-effectiveness benefits, *Diovan* became the first and only drug of its kind to gain an approval for heart failure patients. To complement the broad choice and flexibility for patients and physicians, a new strength of *Co-Diovan* (*Diovan* combined with a diuretic) was launched under the name of *Diovan HCT* in the US.

Lotrel (benazepril+amlodipine), another Novartis flagship antihypertensive, increased sales by 35%, supported by new data showing that patients switched from *Norvasc*® (a Pfizer product) experienced better blood pressure control with less edema. A new dosage strength was launched in mid-year in the US and others were filed in December for FDA approval.

Lescol (fluvastatin), a lipid-lowering drug (statin) grew strongly (18%), reflecting its positive risk/benefit profile and convenient extended-release formulation.

The *Lescol* Intervention Prevention Study (LIPS) pub-

lished last year was the first prospective study to evaluate the effects of a statin exclusively in patients who have undergone percutaneous coronary intervention (PCI) procedures such as angioplasty. These patients are at a high risk of a second major adverse cardiac event.

The LIPS findings showed that *Lescol* 80 mg significantly reduced major adverse cardiac events by 22%, even in patients with normal cholesterol levels. Moreover benefits of *Lescol* were even more profound in high-risk patients with diabetes and multi-vessel disease. Novartis has filed regulatory applications for the additional indication of secondary prevention of cardiovascular events in patients who have undergone PCI procedures. If approved, *Lescol* could help the 1.8 million patients worldwide who undergo angioplasty procedures annually.

Lamisil (terbinafine), used in the treatment of fungal infections of the nails, extended its share of US prescriptions to more than 80% and achieved a 4% increase in a declining market.

Elidel (pimecrolimus) was launched in 13 countries, including the US. Sales reached CHF 148 million, and within just six months this highly effective, non-steroid cream became the number-one branded treatment for eczema in the US.

Exelon (rivastigmine) for the treatment of Alzheimer's disease posted strong sales growth of 26%, lifted by the European approval of a labeling expansion to include the product's unique property of inhibiting two enzymes believed to be related to the cause Alzheimer's disease.

During 2002, European regulatory officials approved the additional labeling of *Exelon* as an inhibitor of both acetylcholinesterase (AChE) and butyrylcholinesterase (BuChE). Recent research suggests that BuChE may play an increasingly important role in regulating brain acetylcholine levels as Alzheimer's disease progresses and that the dual inhibitory action of *Exelon* may provide additional treatment benefits for patients with the disorder. This makes *Exelon* unique in its class as the other cholinesterase inhibitors commonly used to treat Alzheimer's disease, such as donepezil and galantamine, inhibit only AChE.

Trileptal (oxcarbazepine), used in the treatment of epilepsy, continued to post substantial sales growth (91%), supported by increased use as a monotherapy and by launches in Canada and Australia.

Zelnorm/Zelmac (tegaserod/tegaserod maleate), a drug for constipation-related irritable bowel syndrome in women, gained approval in the US in September, and sales reached CHF 70 million.

Oncology

Novartis Oncology continued to outperform industry growth rates, gaining further market share and posting strong sales growth of 28% in local currencies. Novartis is now the fastest growing of the world's top five oncology companies.

Gleevec/Glivec (imatinib mesylate), our breakthrough treatment for chronic myeloid leukemia and gastrointestinal stromal tumors, continued to bring benefits to thousands of patients in more than 80 countries. Sales exceeded CHF 950 million, making it Novartis' fifth biggest product. *Gleevec/Glivec* was awarded the prestigious international Prix Galien and is currently under investigation for additional uses in more than 100 clinical trials.

Zometa (zoledronic acid) gained approvals for use in bone metastases in a broad range of cancers and posted sales of CHF 758 million, making it the world's most prescribed intravenous bisphosphonate for bone metastases. More potent and convenient than its predecessor, *Aredia*, it is approaching or has exceeded the previous sales level of *Aredia* in many markets.

Sandostatin (octreotide), used in the treatment of acromegaly and carcinoid syndrome, continued to post substantial double-digit growth, with sales up 23%.

Femara (letrozole), an oral aromatase inhibitor for first-line therapy of advanced breast cancer in postmenopausal women, posted a 37% rise in sales. Having demonstrated superiority to the previous standard therapy, tamoxifen, *Femara* is rapidly growing in the US in the first-line metastatic cancer setting.

Ophthalmics

Ophthalmics continued to surpass industry growth, as 2002 sales climbed 7% in local currencies, driven by *Visudyne*.

Visudyne (verteporfin), the innovative treatment in macular degeneration (wet), achieved sales growth of 27%, and has now been approved in more than 65 countries for its main indication and in more than 45, including the EU, US and Canada, for additional indications.

Transplantation

*Neoral/Sandimmun (*cyclosporine) remains a cornerstone of immunosuppression and continues to compete strongly against branded and generic competition, owing to a reluctance among physicians to switch patients who are stable and doing well on it.

Simulect (basiliximab), designed to prevent early rejection and optimize clinical outcomes, posted a 21% rise in sales following its successful launch in Japan and continued market segment share gains from established competitor brands in most regions.

Myfortic (mycophenolate sodium), gained first approval in Switzerland, Brazil, India and Australia for preventing organ rejection in kidney transplantation, while *Certican* (everolimus), a novel drug that targets primary therapy of chronic rejection, was submitted for approval in the EU and US.

Mature Products

This business unit attempts to enhance the value of brands at late stages of their product cycles. Often its brands have lost patent protection and face strong generic competition. By pioneering low-cost marketing activities, ranging from e-marketing to extensive use of external field forces, Mature Products maximizes cash generation while at the same time ensuring a sharper strategic focus on older products than they would receive as part of growth businesses such as Primary Care, Oncology or Ophthalmics.

Of the mature brands, the anti-inflammatory *Voltaren* continued to compete well against generics and the COX-2 inhibitor class of drugs, while the antihypertensive *Cibacen/Cibadrex* (*Lotensin/Lotensin HTC* in US) delivered a 9% increase in sales, mainly as a result of renewed external field-force support in the US.

Business Development and Licensing

During 2002, Novartis acquired rights to develop and commercialize several early-stage compounds targetting major diseases. Novartis and Dainippon Pharmaceutical Co. reached a license agreement for AC-5216, a pre-clinical compound for treatment of anxiety. The transaction gave Novartis exclusive worldwide rights outside Japan and certain Asian countries. AC-5216 is a so-called mitochondrial benzodiazepine receptor ligand, a novel class of compounds which has demonstrated a rapid onset of action.

Under an agreement with Tanabe Seiyaku Co., Novartis received a license to develop and market any of Tanabe's LFA-1 antagonists in the US, Europe and many other countries. The LFA-1 antagonists block a key cell-adhesion molecule expressed on the surface of white blood cells and may have therapeutic potential in the treatment of autoimmune disorders such as rheumatoid arthritis and psoriasis, as well as prevention of graft rejection in organ transplants.

Novartis also reached an agreement with India's Torrent Pharmaceuticals Ltd. regarding global rights to an early-stage development compound known as an "AGE-breaker," under investigation for potential use in the treatment of heart disease.

Several promising compounds already in clinical testing are expected to reach key milestones during 2003.

FTY720, a novel selective immunosuppressant, is being evaluated for prevention of acute rejection and graft loss in kidney transplant patients. Currently in Phase II, it has been shown to protect the transplanted organ against T-cells without changing the host's ability to respond to antigens.

ICL670, an oral iron chelating compound for the treatment of iron overload in transfusion-dependent anemias, will begin Phase III trials early in 2003. With once-daily administration, ICL670 is expected to eventually replace the currently available treatment, *Desferal*.

PTK787, an angiogenesis inhibitor which works through the VEGF pathway to block blood vessels that supply tumors, is expected to begin Phase III testing early this year. PTK787 could be the first oral drug of its kind to reach the market.

AAG561 could be the first in class among the corticotropin-releasing factor 1 antagonists, a novel concept in the treatrment of depression and anxiety which encompasses huge patient populations. Phase II trials are expected to start during 2003.

AAE581, an innovative inhibitor of the cathepsin K enzyme which degrades bone matrix, is also scheduled to begin Phase II this year. Inhibition of cathepsin K in osteoclasts leads to reduced collagen breakdown and decreased bone resorption.

SAB378, a cannabinoid (CB1) agonist, represents a novel concept in treating pain which, on the basis of preclinical results, could be more potent than major current treatments. Results of proof of efficacy studies are expected during 2003.

...compounds to study...

Ulrich Schopfer, PhD, and Driss Ouzineb, Novartis Lead Discovery Center, Basel, Switzerland

Joining Forces in the Quest for Cures by Stephen Moore

Novartis works closely with many of the world's leading clinicians to develop innovative approaches to intractable diseases and satisfy unmet medical needs.

These partnerships can stretch over many years – sometimes even decades. But breakthroughs in the US for two Novartis drugs last year show that rewards can be worth the wait.

In July the US Food and Drug Administration (FDA) approved *Zelnorm*, an exciting new treatment for the constipation-predominant form of irritable bowel syndrome or IBS in women. So far, Novartis is one of the few pharmaceutical companies willing to tackle IBS, a debilitating disorder affecting millions of people around the world but one that is difficult to define and diagnose.

Pioneering research by academic allies and development of tools to refine diagnosis of IBS speeded the development of *Zelnorm/Zelmac*. In addition, bold endorsements of the drug's potential by outside experts helped rescue *Zelnorm/Zelmac* during early stages of development when its future was in doubt.

Another Novartis product that notched a major regulatory breakthrough last year was *Clozaril*, a well-known drug used to treat schizophrenia patients who fail to respond to two standard antipsychotic therapies. Shortly before Christmas, the FDA approved *Clozaril* for the treatment of recurrent suicidal behavior in patients with schizophrenia or schizoaffective disorder. It was the first time that any medication had won FDA approval for use in treating suicidal behavior.

Suicide is a silent epidemic that takes a daunting toll among people with schizophrenia. Roughly 10% of schizophrenia patients die as a result of suicide and about 40% attempt suicide at some point during the course of their disease.

Herbert Meltzer, MD, the Bixler Professor of Psychiatry at Vanderbilt University School of Medicine and a longtime Novartis advisor, was one of the first clinicians to recognize and demonstrate the potential of *Clozaril* to reduce suicidal behavior. Over the past four years, Dr. Meltzer was the driving force behind the International Suicide Prevention Trial, or InterSePT, a landmark study which provided compelling evidence for the FDA's approval of the additional *Clozaril* indication.

"Novartis took quite a risk in doing the study and the potential benefits may be life-saving," Dr. Meltzer says. "It's almost like a fairy tale."

"A Truly Historic Step."

The InterSePT trial epitomizes the long-term commitment Novartis makes to core therapeutic areas such as schizophrenia and other mental disorders, cardiovascular disease or cancer. In recent years, research and development spending has been focused increasingly on these core areas, which are considered to have superior growth prospects. Sometimes, however, the interests of patients or the company's medical pedigree outweigh commercial considerations.

When InterSePT was initially proposed, *Clozaril* was already poised to lose patent protection in most major markets. Novartis officials agreed to invest millions of dollars in the study – knowing that even if it was a success, any potential financial benefit would be shared with producers of generic versions of clozapine, the generic name for *Clozaril*.

Ironically, the FDA approved the first generic version of clozapine in November 1997 – the same day Novartis Chairman and CEO Daniel Vasella, MD, had invited dozens of international investigators associated with InterSePT to a kick-off meeting in the Swiss Alps. "We were all crestfallen," Dr. Meltzer recalls. "I was absolutely convinced that it would be the end of the study."

Dr. Vasella never wavered. "We felt a responsibility to physicians and patients to see if *Clozaril* really could reduce suicidal behavior," he says. "Nobody else was going to finance any new study – generics were riding on our back."

That decision was even more remarkable because the pharmaceutical industry had traditionally avoided the treatment of suicide – and systematically excluded suicidal patients from clinical trials for fear of potential legal liabilities if patients took their own lives while receiving an experimental therapy.

In a letter to Dr. Vasella last year, Richard Nakamura, Acting Director of the National Institute of Mental Health, "strongly commended Novartis and investigators associated with the InterSePT study" for efforts which, he said, could "lead to a new phase in suicide

prevention research." Dr. Nakamura added he was "very much aware of the many methodological and legal challenges that have served as barriers to the development of clinical trials focused on reducing suicidality. For industry to take the lead in seeking an indication for suicide risk reduction is "…a truly historic step."

A More General Phenomenon

Helping such patients was a distant dream back in the 1980s when Dr. Meltzer made his initial observations about the benefit *Clozaril* seemed to provide by reducing suicidal thoughts and behavior. A pair of patients stand out in his memory: one woman who had made multiple suicide attempts and was tormented by hallucinations directing her to try again, and another woman who had made repeated suicide attempts prior to trying *Clozaril*. It quelled their symptoms so effectively, Dr. Meltzer says, "it made me wonder if this was a more general phenomenon."

The question took more than a decade to answer. The delay stemmed from the turbulent history of *Clozaril* as a drug associated with serious adverse events as well as major benefits. As the first in a new class of "atypical" antipsychotics, *Clozaril* had such positive effects on cognition that it enabled many patients to leave institutionalized care and hold a job or return to school. Moreover, *Clozaril* was apparently not associated with many vexing side effects associated with earlier "neuroleptic" schizophrenia treatments – from muscle spasms, tremors and erratic body contortions, to facial tics and involuntary movements of the neck and tongue.

However, *Clozaril* posed other safety concerns in a small proportion of patients. The biggest worry was agranulocytosis, a blood disorder where sudden declines of white blood cells could leave patients vulnerable to infections. Physicians weren't able to predict which patients were likely to develop agranulocytosis, and in 1975, after eight Finnish patients taking *Clozaril* developed agranulocytosis and died, the drug was pulled from markets worldwide.

Once a medicine is withdrawn for safety reasons it rarely returns – but, once again, *Clozaril* proved an exception. Physicians and patients who couldn't find an effective replacement prodded regulatory authorities to allow *Clozaril* back on the market and the drug made a stunning comeback during the late 1980s and early 1990s, including first-ever approvals in the US, the UK and certain other countries.

Still, because of lingering safety concerns, regulators restricted use of *Clozaril* to patients who had failed to respond to other treatments. Even those patients had to take extra precautions – including mandatory weekly blood tests. The "no blood, no drug" policy was designed to catch adverse reactions early enough to head off severe cases of agranulocytosis.

Clozaril vs. Zyprexa®

In the meantime, Dr. Meltzer had tested his initial hypothesis about a possible positive effect on suicidal behavior by treating dozens of patients with *Clozaril*. In 1995, he and research assistant Ghadeer Okayli published a landmark paper showing that *Clozaril* actually did decrease suicidal ideation in patients. A similar positive effect was later reported by other researchers – which set the stage for InterSePT.

Criteria for enrollment included previous suicide attempts or severe suicidal ideation shortly before admission to the study. For ethical reasons, investigators felt that such severely ill schizophrenia patients couldn't be deprived of medication by assignment to a "placebo" arm receiving inactive sugar pills as treatment. So InterSePT was designed as a head-to-head test of two active comparator drugs – *Clozaril* against Zyprexa®, another "atypical" antipsychotic from Eli Lilly & Co. Besides being one of the most widely used treatments for schizophrenia, Zyprexa® had shown some hints of efficacy in reducing suicidal behavior.

In all, 980 patients began the two-year InterSePT study; 490 participants were treated with *Clozaril* and the remaining 490 patients with Zyprexa®. Results were unequivocal: compared to Zyprexa®, *Clozaril* reduced the risk of significant suicide attempts, and hospitalizations to prevent suicide by 26%.

During the study and one-month safety follow-up period, 10 participants committed suicide – six of them patients who had received *Clozaril* and the remaining four Zyprexa®. For such a high-risk population, says

Dr. John Kane, MD, Chairman of the Department of Psychiatry at Long Island Jewish Medical Center and head of the InterSePT study's steering committee, the number of suicides was extremely low and the difference in completed suicides between *Clozaril* and Zyprexa® wasn't statistically significant. It should be noted that death was not an endpoint in the InterSePT study because, in order to demonstrate a reduction in suicide, over 20 000 patients would have had to have been enrolled.

Although there were no cases of agranulocytosis during interSePT, the adverse event profile was generally consistent with the market experience of *Clozaril*. But in calculations assuming the historical incidence of serious side effects such as agranulocytosis or myocarditis, the risk-benefit ratio suggested by InterSePT was striking. For every 1 000 patients treated for two years with *Clozaril*, about 4.5 patients would experience a serious side effect (agranulocytosis or myocarditis) while 77 patients would be prevented from a suicide attempt or hospitalization to prevent suicide.

The impressive percentage of patients who completed the trial – and the unexpected low number of deaths – underscored the quality of care provided by investigators despite challenging circumstances. At a meeting with an FDA Advisory Committee late last year, Dr. Kane noted that suicidal behavior is the most frequent source of litigation against psychiatrists.

"Many of us are extremely uncomfortable treating a few individuals at this high a risk – knowing that in schizophrenia, suicide attempts can be very unpredictable and very lethal," he added. "There's anxiety on the part of clinicians to make sure they get it right – above and beyond anything to do with the research."

"Every Clinician's Nightmare"

The upbeat news from InterSePT comes amid mounting concern about suicide. Healthcare authorities ranging from the US Surgeon General and Britain's Ministry of Health to the Geneva-based World Health Organization (WHO) have launched anti-suicide campaigns in recent years.

The Surgeon General's office observes that about 30 000 Americans take their own life every year, more than the annual number of homicides across the US. The WHO estimates that more than 800 000 people worldwide commit suicide. At least 80% of those victims suffer from a mental disorder or substance abuse, WHO officials note.

Meanwhile, about 500 000 people in America per year require emergency room treatment as a result of attempted suicide. On top of thousands of dollars in direct hospital bills, an unsuccessful attempt can lead to physical impairment – from gunshot wounds to overdoses that cause permanent organ damage.

With FDA approval of the new *Clozaril* indication, patients will be the big winners. Dr. Kane predicts that several hundred thousand patients (of the estimated 2 million Americans living with schizophrenia) "would be candidates for any treatment that might help reduce the risk of suicide."

"A patient who has psychosis and also has made suicidal acts in the past is every clinician's nightmare," says Delbert Robinson, MD, a research psychiatrist at Hillside Hospital in New York and an investigator who treated patients during InterSePT. "They're the ones you worry about at night."

They're also the patients InterSePT aimed for – and the ones *Clozaril* can do most to help. Dr. Ranga Krishnan, MD, a Professor of Psychiatry at Duke University and chairman of the InterSePT suicide monitoring board, looked behind dry statistics to give a fuller description of the kind of patients which InterSePT attracted during his presentation to the FDA Advisory Panel meeting.

"These individuals were very, very ill," Dr. Krishnan said. Prior to enrollment or during the study, he said that there were incidences of patients jumping off bridges, trying to hang themselves or taking overdoses – all of which underscored the lack of support systems as well as chronicity of illness of participants. "The stories were striking," he said.

While formal FDA approval will make physicians more comfortable in prescribing *Clozaril* for the new indication, additional support may come from guidelines covering the treatment of prevention of suicide which the American Psychiatric Association is considering.

Still, Dr. Meltzer cautions that uptake of InterSePT

findings into clinical practice probably will be relatively slow. "Within six to 18 months, there should be a clear signal of the use of *Clozaril* for this purpose," he says.

But he expects InterSePT to spur research in related mental disorders, such as psychotic depression and bipolar disease, where suicide is even more of a problem than in schizophrenia.

Zelnorm/Zelmac: The Road to Relief

In June 1995, a group of US gastroenterologists journeyed to Jackson Hole, Wyoming, to discuss a promising new medicine from Sandoz, a predecessor company to Novartis, against irritable bowel syndrome, or IBS.

The hand-picked group functioned as a scientific sounding board to Dr. Vasella, who at that time was still a pharmaceutical-division executive. He was irked by sluggish progress of the experimental IBS compound known by its generic name tegaserod but not yet its ultimate brand names *Zelnorm* in the US and *Zelmac* everywhere else. He recalled too well from his clinical experience the suffering of patients with severe IBS.

"Nobody was interested in pushing it – apart from a team of preclinical scientists," Dr. Vasella recalls. "I needed to build credibility for the project – and have key people inside the company hear from outside experts that this was exciting."

He got the endorsement he was after. One participant at the Jackson Hole meeting – Dr. Chung Owyang, MD, of the University of Michigan Medical School – recalls that the experts "argued for a whole afternoon" and finally agreed "that tegaserod looked very positive based on what we knew about the properties of the compound." However the group also warned that development wouldn't be easy.

Their prediction was on target – and the road to approval has been a memorable one. "*Zelnorm* was in the coffin several times – but we always managed to pull it out at the last minute," Dr. Vasella says with a wry smile.

As occurs so often in pioneering research, *Zelnorm/Zelmac* found its way from the laboratory to pharmacy shelves because a handful of people were convinced that the new medicine offered patients real benefits. The strength of their conviction sustained the *Zelnorm/Zelmac* development team through years of shoestring budgets and a brutal pruning of research projects.

Yet, because Novartis lacked first-hand experience in IBS, it continued to rely heavily on contributions from these advisors and other outside experts. That cooperation is set to continue as Novartis steps up an education and awareness drive aimed to broaden understanding of IBS beyond the ranks of specialists.

"Treating IBS has been a frustrating experience both for patients and from our side because we haven't had anything really effective to offer them," Dr. Owyang says. "Now we need to educate primary care physicians that IBS isn't a single disease entity and that they need to identify subgroups of patients that will best respond to a specific drug. That education has to be done at a grassroots level."

Little Compassion

The biggest obstacle to the development of *Zelnorm/Zelmac* was the nature of IBS itself. Characterized by chronic, episodic abdominal pain and discomfort, bloating and altered bowel function (constipation and/or diarrhea), the disorder lacked well-accepted diagnostic criteria. IBS also has no clear biological disease marker or structural abnormality that easily identifies affected individuals. And although IBS is a chronic condition, the symptoms wax and wane, presenting a potential pitfall to researchers attempting to design clinical trials testing the safety and efficacy of new treatments.

One of the most common gastrointestinal (GI) disorders, IBS is estimated to affect up to one in five Americans. It occurs in both men and women; however, the prevalence appears to be greater in women. The condition is a leading cause of workplace absenteeism, second only to the common cold, and accounts for approximately 12% of all visits to primary care physicians and 28% of visits to gastroenterologists.

Though many people with IBS are ashamed to discuss their condition, the disorder has a significant impact on their daily lives. "There is little compassion when it comes to understanding IBS and its impact," Nancy Norton, founder and president of the International Foundation for Functional Gastrointestinal Disorders, told an FDA advisory panel three years ago.

"The feelings of fullness and bloating, the pressure that begins in your rib cage, the distension in your stomach, the ache through your midsection and the cramping in your abdomen that causes people with IBS to double over in pain can be debilitating," she added. "Many sufferers are afraid just to eat in a restaurant or go to a movie, for fear that their condition could flare at any time."

The medical community has recognized that therapies traditionally used to treat the abdominal pain/discomfort, bloating and constipation of IBS have been generally ineffective and poorly tolerated. At the June 2000 meeting at which an FDA advisory panel reviewed *Zelnorm*, Dr. Arnold Wald, MD, of the University of Pittsburgh Medical Center, listed multiple medications, from tricyclic antidepressants and anticholinergic agents, to bulking agents and laxatives, which physicians traditionally have prescribed to treat IBS. "There are no supporting data that suggest efficacy for any one of these agents, or a combination," Dr. Wald said.

Secrets of Serotonin

First synthesized in 1989, *Zelnorm/Zelmac* was designed to stimulate activity of a serotonin receptor subtype called 5-HT4. Serotonin is a chemical messenger also found in the brain where it is believed to affect moods – but 95% of serotonin in the body is localized in the GI tract, where it regulates motility and influences the perception of pain and discomfort.

Zelnorm/Zelmac is the first agent in a new class of drugs called serotonin-4 receptor agonists (5-HT4 agonist). By activating 5-HT4 receptors, *Zelnorm/Zelmac* stimulates the peristaltic reflex and normalizes impaired motility in the GI tract. Based on this effect, it was identified early as a potential treatment not only for IBS but also for a range of GI problems, such as chronic constipation and functional dyspepsia.

The development program for *Zelnorm/Zelmac* was officially started in 1991 and within months survived its first close call when Sandoz, Novartis' predecessor, overhauled research programs and narrowed its focus to fewer disease areas. As a result, all but the most promising in-house research in GI diseases was halted; development of *Zelnorm/Zelmac* was allowed to continue with limited resources.

Personal sacrifices made by the drug's few champions helped keep the development program moving. Hans-Juergen Pfannkuche, MD, a pharmacologist who was one of the earliest members of the development team, moved on to respiratory research when the GI research program was halted, but he continued to work on *Zelnorm/Zelmac* part time. "Zelnorm was showing so much potential, I maintained research on it on top of regular business – it became a sort of hobby," he says. Other researchers divided their time between *Zelnorm/Zelmac* and day jobs in the dermatology, transplantation and cardiovascular disease areas.

The outlook for *Zelnorm/Zelmac* brightened following Dr. Vasella's conference in Jackson Hole. Members of his sounding board offered to help Dr. Pfannkuche and improve understanding of *Zelnorm/Zelmac* by testing the drug in their own labs using their own models.

Another key breakthrough about the same time was improved design of clinical trials made possible by new diagnostic tools. Earlier trials, which produced inconclusive results, had involved patients with a wide range of IBS symptoms. Research advances showed that IBS actually comprised a heterogenous group of patients – and that to be effective, clinical trials would have to match new drugs more selectively with subgroups of patients most likely to respond.

The scientific tools needed for more selective diagnosis became available when a group of experts issued guidelines called the "Rome Criteria" in 1994. The Rome Criteria, which are modelled on the so-called DSM classification system created for psychiatric disorders, were updated in 1999, and a third revision is currently underway and expected to be completed by 2006, according to Douglas A. Drossman, MD, co-director of the Center for Functional GI and Motility Disorders at the University of North Carolina and initiator of the Rome guideline program.

"By giving physicians a means with which to make the diagnosis, the Rome guidelines have helped to standardize and, in many ways, to legitimize the field of IBS," Dr. Drossman says. "And by making IBS easier to understand and diagnose, the Rome Criteria make pharmaceutical products more acceptable because the physicians know what they are dealing with."

"Functional GI disorders may not have a structural basis that's easily identified," Dr. Drossman says. "But they're real, just like migraine headaches or problems of that sort."

Not Over Yet

Before putting the new diagnostic tools to work, the *Zelnorm/Zelmac* development team had to surmount several additional pitfalls. When the Phase II trial program was completed in February 1996, Sandoz research management put the project on hold due to resource limitations. Later, when Ciba and Sandoz slashed the number of drugs in their combined research and development pipelines as a result of their merger, *Zelnorm/Zelmac* once again seemed in jeopardy. Although the project ultimately was continued, funding for Phase III trials remained tight.

Nevertheless, by the time those Phase III trials neared completion in 1999, *Zelnorm/Zelmac* had enough support at Novartis to become a "heavyweight project," a designation given to the most promising drugs in the pipeline. The budget was increased and preparations began to test safety and efficacy in additional GI disorders, including chronic constipation and functional dyspepsia. Clinical testing in these new GI disorders continues today.

The FDA approval of *Zelnorm/Zelmac* is based on clinical trials that show the drug provides relief of abdominal pain and discomfort, bloating and constipation in women with IBS. In three multicenter, double-blind placebo-controlled studies, 2 470 women with at least a three-month history of IBS symptoms prior to the study baseline period that included abdominal pain, bloating and constipation, received either *Zelnorm* 6mg/b.i.d. or placebo.

Each week, participants rated their response to the "Subject's Global Assessment of Relief," a measurement tool that takes into account overall well-being, symptoms of abdominal pain and discomfort, and altered bowel function. Based on this assessment, more patients on *Zelnorm/Zelmac* experienced relief than patients on placebo. In addition, it was shown to provide relief of the individual symptoms of abdominal pain/discomfort, bloating, and constipation.

Initially, *Zelnorm/Zelmac* was designated a priority review product by the FDA. After reviewing the application, the FDA requested additional data, and the Novartis US affiliate company worked closely with the FDA to provide the necessary data and finally bring the product to approval.

Approvals have been received in more than 25 other countries, where the drug is marketed under the brand name *Zelmac*.

After devoting more than a decade to the compound, Dr. Pfannkuche is eager to tackle unanswered questions about the drug. One key project will study genetic patterns among patients in hopes of identifying sub-groups more likely to respond to treatment with *Zelnorm/Zelmac*. After coming so far, he says, "we haven't seen the end of the story yet."

...curious to explore...

Dermatological University Clinic, Frankfurt am Main, Germany

Consumer Health

Shaping Consumer Health

Creating, developing, manufacturing and marketing a wide range of competitively differentiated products that restore, maintain or improve the health and well-being of our customers. Creating strong, consumer-oriented and trustworthy brands. This best describes the focus of our reshaped Consumer Health Division, which since July 2002 includes our Generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition et Santé franchise), Infant & Baby, and our CIBA Vision business units. Each business unit has a leading market position in growth-orientated healthcare segments beyond our core pharmaceuticals business – thereby also providing essential, high quality health-related products.

In the dynamic world of consumer healthcare – the growth of which is driven variously by "mega trends" such as aging population, scientific advances, broadening healthcare knowledge and overall economic momentum – the success of each Business Unit depends upon its ability to anticipate and meet the needs of consumers and health professionals worldwide.

Consumer Health Division Overview

In late 2002, the Business Unit Heads launched a number of shared business initiatives, which will extend throughout 2003 and from which we expect considerable synergies. After the sale of the Food & Beverages business to Associated British Foods plc., the remaining Health Food & Slimming and Sports Nutrition businesses have been reorganized as a stand-alone unit, Nutrition & Santé, which for external reporting purposes will be consolidated into our Medical Nutrition business.

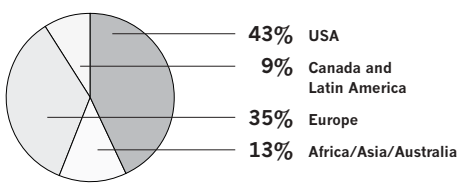
	2002 CHF millions	2001 CHF millions	Change in CHF %
Sales	**11 410**	11 462	0
Operating income	**1 684**	1 513	11
Research and development	**587**	541	9
Research and development as % of sales	**5**	5	
Free cash flow	**1 354**	940	44
Net operating assets	**8 133**	8 032	1
Investments in tangible fixed assets	**561**	510	10

	2002	2001	% change
Number of employees	**27 552**	28 848	-5

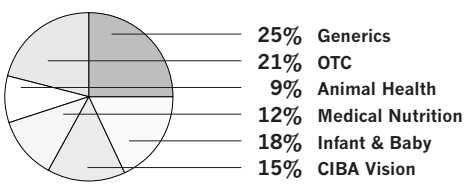
Sales by business unit	2002 sales in CHF millions	Change in local currencies %
Generics	**2 809**	**25**
OTC	**2 359**	**-1**
Animal Health	**971**	**10**
Medical Nutrition[1]	**1 109**	**4**
Infant & Baby	**2 075**	**3**
CIBA Vision	**1 762**	**6**
Divested Health & Functional Food activities	**325**	
Total	**11 410**	**7**

[1] Including Nutrition & Santé

Sales by region



Sales by business unit



Key Marketed Products

Business unit	Product	Description	Product	Description
Generics	The Generics Business Unit markets a wide range of products in categories such as antibiotics, cardiovascular and central nervous system drugs, alimentary tract and hormonal preparations			
OTC				
	Nicotinell/Habitrol	Smoking cessation	***NeoCitran, Thera Flu***	Cold and flu remedies
	Voltaren Emulgel	Topical muscle pain	***Maalox***	Antacid
	Sandoz	Minerals	***Ex-Lax, Benefiber***	Laxatives
	Lamisil AT Cream	Athlete's foot	***Fenistil***	Wound healing
	Otrivin	Nasal decongestant	***Gas-X***	Anti gas
	Triaminic	Pediatric cough and cold	***Denavir, Vectavir***	Cold sore
Animal Health				
Companion animals	***Fortekor***	Treatment of heart failure in dogs and chronic renal insufficiency in cats	***Interceptor***	Prevention of heartworm and intestinal worms in dogs
	Program	Control of fleas on cats and dogs	***Sentinel***	Prevention of heartworm and intestinal worms and control of fleas in dogs
Farm animals	***Tiamutin, Econor***	Treatment of bacterial infections in pigs and poultry	***Endex***	Treatment and control of liver fluke and gastrointestinal worms in cattle and sheep
	Clik	Season-long prevention of blowfly strikes in sheep		
	Fasinex	Treatment and control of liver flukes in cattle and sheep	***Vetrazin***	Treatment of blowfly infestation in sheep
Vaccines and aquahealth	***Bovidec***	Prevention of BVD in cattle	***Birnagen Forte,***	Prevention of IPN in farmed salmon
	Betamax, Excis	Treatment and control of salmon lice	***Furogen***	
	Virashield	Prevention of respiratory diseases in cattle	***Fusogard***	Prevention of footrot and liver abscess control in cattle
	Pyceze	Treatment and control of fungal infections in fish and fish eggs	***Scourboss,*** ***Somnustar***	Prevention of enteric disease in cattle
Medical Nutrition				
	Isosource	Standard tube feed range	***Novasource***	Disease specific tube feed range
	Impact	Immunonutrition brand	***Resource***	Standard and disease specific oral supplements
	Compat	Medical devices		
Infant & Baby				
	Gerber Infant and Baby Foods	A selection of over 190 foods for different stages of infancy	***Gerber Wellness***	Skincare, diaper rash, tooth and gum care, infant drops and oral rehydration
	Gerber Graduates	A wide variety of foods for toddlers	***Gerber Care Products***	Bottle feeding, breastfeeding, pacifiers, playthings, etc.
	Tender Harvest	Organic baby foods		
CIBA Vision				
Contact lenses	***Focus DAILIES***	Daily disposable contact lens	***FreshLook ColorBlends***	Opaque lens that blends three colors for more natural appearance
	Focus DAILIES Toric	Daily disposable lens to correct astigmatism	***Focus 1-2 Week***	For replacement every one to two weeks
	Focus DAILIES Progressives	Daily disposable lens to correct presbyopia	***Focus Progressives***	Multi-focal lens to correct presbyopia
	Focus NIGHT & DAY	Continuous wear lens for up to 30 nights and days	***Focus Monthly***	For replacement on a monthly basis
			Focus Toric	Monthly replacement lens to correct astigmatism
Lens care products	***AOSept***	One-step hydrogen peroxide system	***SOLO-care***	Ten-minute multipurpose solution
	AOSept ClearCare/ AOSept Plus	Enhanced formulation of *AOSept*	***SOLO-care Plus***	Enhanced formulation of *SOLO-care*
Surgical products	***CV232 SRE (Square Round Edge)***	Pre-folded intraocular lens to restore vision in people with cataracts	***PRL (Phakic Refractive Lens)***	Foldable posterior chamber phakic refractive lens designed to float on a patient's natural lens and to self-center behind the iris
	Vivarte	Foldable anterior chamber phakic refractive lens		

Novartis Generics – a Global Supplier to be Reckoned With

Generics continued to outperform industry growth rates with 2002 sales, rising 25% in local currencies (15% in CHF) to CHF 2.8 billion. Novartis Generics focuses on off-patent medicines, so-called generic versions, that are pharmaceutically equivalent to the original branded drug, but can be provided to the customer without the high costs of initial research and development. Retail pharmaceuticals (finished dosage forms) manufactured by Novartis Generics are sold to pharmacies, hospitals and other healthcare providers, while the industrial business produces bulk ingredients and intermediates, both for supply to our retail business, as well as for sale to third parties.

In 2002, Generics extended its core competence further beyond the manufacturing and sale of anti-infectives, looking for additional hard-to-make active substances, while simultaneously expanding many of its production facilities. Our new Biopharmaceuticals franchise provides high-tech compounds such as human proteins. Such "endogenous modulators" can exert a powerful therapeutic effect even at very low doses and are manufactured almost exclusively using gene technology and modern biotechnological methods. Building on its strengths, the fast development and industrial production of complex biotech compounds, Novartis Generics is in a position to manufacture these modern, mostly recombinant products reliably and at optimal quality. Parallel to the new organizational structure into three business franchises, Generics moved its headquarters to Vienna, Austria.

Sales were driven by the strong performance of Geneva Pharmaceuticals in the US, the launch of amoxicillin clavulanate potassium in July, as well as strong sales of finished dosage forms such as fluoxetine and omeprazole. Double digit growth rates were achieved in a number of key European countries (UK, France, Italy, Netherlands and Belgium), strongly supported by the launches of omeprazole and fluoxetine.

The growing demand for high quality and attractively priced medications, as well as patent expiries of major products in the years ahead, present substantial opportunities for our Generics business. The acquisition of Lek d.d. in the fourth quarter of 2002, a leading regional pharmaceutical player with strong positions in the growing markets of Central and South Eastern Europe, provides considerable new expansion opportunities for current Novartis products. In addition to complementary market coverage, the combined businesses have a broad product range covering various therapeutic areas such as anti-infectives, cardiovascular and gastrointestinal tract medicines, as well as combined strengths in the production of active ingredients. Equally, access to the powerful Novartis marketing and sales organization to distribute Lek products in the US and EU presents further growth potential. Thus in 2003, the strongly reinforced Novartis Generics organization will have a formidable presence in the major generics markets.

With new momentum derived from the successful launch of the Biopharmaceuticals franchise, the acquisition of Lek and the ongoing modernization of our generics production facilities we expect further growth of our Generics Business Unit above the markets. Furthermore, we expect substantial synergies and new impetus from our new initiative to consolidate our various Generics operations under one brand: the well-established name of Sandoz.

Lek

Based in Ljubljana, Slovenia, Lek is an international group of generics companies and ranks among the leading pharmaceutical businesses in Eastern Europe, while having a broader international presence in several specific product lines. Lek is active in pharmaceuticals and veterinary products. In pharmaceuticals, it has a wide-ranging product portfolio, with substantial expertise in many domains such as cardiovascular and gastrointestinal tract products. The Lek Group employs about 2 580 people in Slovenia and 1 325 abroad. It achieved total sales of SIT 78.5 billion (CHF 544 million), operating income of SIT 9.6 billion (CHF 67 million) and net income of SIT 8.2 billion (CHF 57 million) in 2001.

For further information please consult http://www.Lek.si

OTC – Focusing on Core Brands

In 2002, Over-the-Counter (OTC) Business Unit sales declined 1% in local currencies (–7% in CHF) to CHF 2.4 billion due to the discontinuation of several businesses. Excluding these, on a comparable basis, OTC outperformed its industry with a 3% sales growth. The OTC Business Unit manufactures and sells products for the treatment and prevention of a broad range of medical conditions and ailments to enhance people's overall health and well being.

The OTC business is ranked as the number six global self-medication business with strong positions in Europe (number 2) and North America (number 7), as well as having a growing presence in Latin America.

Novartis has leading brand positions in a number of important and growing category segments, most notably in topical analgesics, athlete's foot and nasal decongestants.

In 2002, OTC had a number of significant achievements following a renewed focus on core brands, innovation led by consumer insight and the successful implementation of our Rx to OTC switch global roll-out program.

Lamisil, the one-week treatment for athlete's foot, added 32% to sales in Western Europe, resulting in a global sales increase of 10% versus 2001.

Voltaren Emulgel, a topical analgesic for muscle pain and the largest OTC brand in the portfolio, reported a solid 5% sales uplift driven by further Rx to OTC switch roll-outs and product innovation. This brand has developed into the number one worldwide in its category.

Otrivin nasal decongestant benefited from the introduction of new moisturizing and allergy formulations which supported the outstanding 11% rise in sales.

Nicotinell/Habitrol, the smoking cessation franchise, grew sales 31% in 2002 driven by the introduction of consumer preferred chewing gums and major private label gains in North America and Asia.

A large proportion of the Novartis OTC portfolio is targeted at the seasonal cough and cold market. The 2002 season was mild in comparison to previous years and impacting total OTC sales performance, which would otherwise have been even better.

Novartis Animal Health

Animal Health outperformed the market with a 10% local currency sales growth (+1% in CHF), increasing sales to CHF 971 million. Our Animal Health business focuses on the well being of companion animals and on the health and productivity of farm animals. Our product range provides solutions for the treatment and prevention of various widespread animal diseases and parasite infestations. The majority of these products are available by prescription through veterinarians.

Animal Health sales outpaced a slowly growing and highly competitive market. Given this challenging environment, new product introductions are the main growth drivers. In the companion animal market, we entered two new indication areas, pain and allergy, introducing several new key brands in 2002:

- *Atopica* is a novel treatment for dogs effected by atopic dermatitis (AD), an allergic skin disease triggered by house dust mites or pollen. Approximately 10% of dogs show some signs of AD. Effected animals most typically respond to this itchy disease with extensive scratching, leading to further aggravation of skin lesions, secondary infections and hair loss. In such patients, treatment with *Atopica* leads to a marked improvement in quality of life, as it effectively relieves the symptoms of AD without the long-term side effects often encountered with corticosteroids. Based on cyclosporine A, *Atopica* is another example of advancing therapeutic options in veterinary medicine through synergies with our pharmaceuticals business.
- *Deramaxx* (deracoxib) is the first and only COX-2 class drug licensed for the control of pain and inflammation associated with osteoarthritis and orthopedic surgery in veterinary medicine. The product now launched in the US targets COX-2 and spares COX-1 enzymes, thus offering a new therapeutic option to the veterinarian.
- In addition, *Milbemax,* another new brand for companion animals was launched in 2002. This new product for the control of a broad spectrum of intestinal parasites in cats and dogs greatly facilitates pilling for both the pets and their owners.

In the Farm Animal franchise, Animal Health achieved double-digit growth primarily by moving into the dynamically expanding vaccines business and the growing sales of therapeutic antimicrobials. We also introduced our new product for a season-long protection of sheep against blowfly strikes, *Clik,* in Europe.

The major pleuromutilin brands, *Tiamutin* (tiamulin) and *Econor* (valnemulin), contributed significantly to the strong growth of the Farm Animal franchise. Indicated for the treatment of microbial infections in pig and poultry, they are based on a highly effective class of drugs exclusively used in animals.

In January 2002, Novartis acquired Grand Laboratories Inc. and ImmTech Biologics Inc., two US companies specialized in the development, manufacture and marketing of vaccines for cattle and pigs. The acquisitions provided Animal Health with an immediate entry into the world's largest farm animal vaccine market, the USA. The two acquisitions are part of the strategic expansion into the vaccine market that Animal Health has pursued to broaden its business base in recent years.

Medical Nutrition – Focusing on Health Benefits

Medical Nutrition including Nutrition & Santé posted sales growth of 4% (–1% in CHF) with sales of CHF 1.1 billion for its ongoing activities. Novartis Medical Nutrition is a leader in its market and offers a complete range of enteral and oral nutrition products and devices tailored to the varying needs of patients and healthcare professionals.

Following the Consumer Health Division strategy of reshaping its product mix to focus on the growth-oriented healthcare businesses in which it has strong competitive advantages, the business unit successfully divested its Food & Beverage business in November 2002 when Ovaltine/Ovomaltine, Caotina and Lacovo were sold to Associated British Foods plc. This divestment provides our former brands with the opportunity to enjoy accelerated growth in a strategically better matched company.

At the same time it allows us to focus on our core market, increasing awareness among healthcare specialists of the importance of optimum nutrition, especially post-operatively and in long-term care for elderly patients. 2002 saw strong performance of Isosource and Novasource, enteral nutrition products containing specific blends of essential minerals and nutrients, as well as additional sales impetus coming from Resource, a range of specific medical food formulations, which continued to benefit from the expansion of the home-care channel.

Medical Nutrition will continue to build its business by further leveraging efficient management of out-patients via the home care channel and strengthen its focus on disease-and-age-specific platforms. One example of this target-specific approach is the increasingly recognized importance of immunonutrition. There is now considerable evidence suggesting that adapting and improving the nutrition status of patients in hospital can speed up recovery, help prevent future health problems and reduce healthcare costs. For critically ill patients, disease-specific nutritional support includes the administration of specific nutrients known to have immune-modulating qualities, thus often improving clinical outcomes. *Impact* is an immune-supportive enteral nutrition formula containing a unique combination of ingredients demonstrated to boost the immune system response. Perioperative use of *Impact* provides optimal support of surgical patients with improved outcomes.

Similarly, clinical and health economic studies have shown improved outcomes with the use of our medical nutrition products. Patients in specific disease states, including oncology, diabetes, digestive health and wound care, can have more cost effective and improved health outcomes (i.e. fewer complications, shorter hospital stays) through the supportive care that nutritional products provide to standard treatment regimen. These beneficial clinical effects of nutrition will help support total disease management of patients in the years to come.

Our reorganized Nutrition & Santé business, with its headquarters in Revel, France, has strong brands in the area of Health Food & Slimming including *Céréal, Gerblé, Gerlinéa, Modifast, Dietisa, Pesoforma, Lecinova* and *Milical,* and, in the area of Sports Nutrition, brands include *Isostar, Powerplay* and *Mineralplus*. The management team, under its new CEO Alain Chatillon, will be empowered to reorganize and develop the business to increase competitiveness and profitability – providing a consistent approach across geographies and improving focus and efficiency. Nutrition & Santé will continue to build value with its assets and will succeed in the marketplace.

Infant & Baby

Infant & Baby 2002 sales rose 3% in local currencies (–7% in CHF) to CHF 2.1 billion. The major contributor was the US *Gerber* business, spurred by innovations in the Juice, *Graduates*, and *Tender Harvest* lines. The conversion of the juices and purees range into plastic packaging, and the successful launch of *Lil' Entrées*, a new line of wholesome ready-to-serve meals, were the main drivers of this growth. In the rapidly growing toddlers segment, which offers products for two to three year-olds, revenues were up 5%.

The Baby Care Franchise achieved record market share at year end despite intense competition, with innovations in spill-proof cups. The *Gerber Wellness* franchise posted outstanding sales growth of 7% with the relaunch of its infant skin care line.

For 75 years, the Gerber Products Company has been committed to helping parents raise happy, healthy babies. Through extensive research aimed at understanding and improving infant and toddler nutrition and development *Gerber* is the leading baby food brand in the USA with more than 200 food products.

In 2002, we increased our market share. The major contributor to the Infant & Baby Business Unit's solid performance was the USA, spurred by overall innovations and especially the introduction of our new microwavable ready-to-serve meals in trays. These *Lil' Entrées* are specially designed convenient and nutritious meals for toddlers "on the go" with their families.

During the past year, US media has been reporting on the "epidemic" of childhood obesity. Recognizing its role as a leader in infant nutrition and using its 75 years of baby food experience, Gerber launched a consumer education campaign to help combat this national health problem. The campaign called "Start Healthy" aims to enhance awareness among parents and health professionals of the importance of a healthy nutritional diet early in a child's life to avoid serious health consequences such as obesity during adulthood.

"Start Healthy" began on August 19, 2002, with an advertisement in TIME Magazine, propagating the message that "now is the time to teach your baby good eating habits for life." So far, the "Start Healthy" campaign has reached 500 000 consumers and medical professionals via a new brochure, which offers tips and data on appropriate nutrition for infants and toddlers. In October, *Gerber* and the prestigious American Dietetic Association (ADA) announced that they would collaborate under the "Start Healthy" umbrella to develop a broad consumer education campaign in 2003. As a first step, the ADA and *Gerber* have invited nationally renowned experts to join a nutrition panel, which will develop dietary guidelines for children 6 to 24 months of age.

The public reaction to the "Start Healthy" initiative has been extremely positive, beginning with consumer response to the TIME Magazine advertisement. Both consumers and professionals have demonstrated interest and support in direct contacts with *Gerber* through its call-in center and professional resource line. US Secretary of Health and Human Services Tommy Thompson endorses the campaign and participated with *Gerber* and the ADA in a "Start Healthy" media briefing.

The Wall Street Journal and other US national media have covered *Gerber*'s nutrition initiative, and media interest continues with more than 20 million media impressions recorded in just three months.

During 2003, "Start Healthy" will add a grassroots campaign and disseminate important information from Gerber-sponsored research on the topic of infant and toddler nutrition to professionals and parents.

CIBA Vision – Visualizing the Future

CIBA Vision continued to grow with a 6% sales growth in local currencies (–1% in CHF), achieving CHF 1.8 billion in sales. CIBA Vision is a global leader in the research, development and manufacturing of optical and ophthalmic products, including contact lenses, lens care and ophthalmic surgical products.

Focus DAILIES, our one-day disposable contact lenses, and *Focus NIGHT & DAY*, our lenses for up to 30 days and nights continuous wear, continue to lead the contact lens industry in the daily disposable and continuous wear categories, respectively.

The tremendous success of *Focus DAILIES* worldwide has led to the introduction of line extensions including *Focus DAILIES Progressives* for correction of presbyopia and, the latest innovation, *Focus DAILIES Toric*, daily disposable lenses for correction of astigmatism. Astigmatism is a common vision condition, which is caused when the front surface of the eye is not perfectly spherical, making vision correction a challenge.

Substantial new opportunities emerged in 2002 for our *Focus NIGHT & DAY* lenses, boosted by legal proceedings against Bausch & Lomb which led to the withdrawal of the only other continuous wear product on the US market.

In the cosmetic contact lens category, the *FreshLook* line was expanded with *FreshLook Radiance* lenses, four new lenses that follow the latest trends in cosmetics by adding shimmer and shine to illuminate light or dark natural eye colors.

Important innovations in lens care include advanced solutions, such as *AOSept Clear Care/AOSept Plus,* representing a new category in lens care with the proven effectiveness of peroxide, but without the added preservatives found in many all-in-one solutions, as well as *AQuify*, used for dry eyes and as a lens drop, and *FreshLook Care,* developed to provide best possible disinfection of color or cosmetic contact lenses.

CIBA Vision is also working on novel approaches in ophthalmic surgery and has acquired the rights in the US and Canada for the *Ex-PRESS* mini glaucoma shunt, a unique, minimally invasive approach for the surgical treatment of glaucoma. Also recently introduced in Europe is an entirely new product for cataract surgery called *VisThesia*, a combination of viscoelastic to replace eye fluid during surgery and anesthetic for pain. Products under development include a subepithelial separator, a medical device that may substantially improve the outcome of laser surgery, and scleral expansion implants, which have shown promising initial results in the treatment of presbyopia, as well as in the treatment of ocular hypertension and primary open angle glaucoma.

...anticipating the needs...

General Hospital, Kandy, Sri Lanka

Corporate Citizenship

Making Things Happen

In our previous Corporate Citizenship reporting we focused extensively on explaining the reasons for our social, humanitarian and ecological commitment and describing the processes we initiated to fulfil our pledges. These mainly revolved around ascertaining our performance in the relevant areas, developing policies and guidelines, and defining targets. We also reported on our many implementation programs and awareness campaigns aimed at incorporating our Corporate Citizenship principles into our business activities. At the time we had few tangible results to show for all our new endeavors.

This year, based on the feedback we have received from stakeholders, we have tried to focus more on describing the tangible results of our activities and on discussing both our successes and shortcomings. We believe that this new reporting attitude reflects a new level of corporate maturity.

To us, Corporate Citizenship builds on three pillars: active engagement in society in areas were we are competent; helping where we can and where help is needed most; establishing and implementing transparent, ethical corporate standards and policies.

Humanitarian Focus

Access to Medicine: Leprosy in Sri Lanka

Since 2000, the Novartis Foundation for Sustainable Development continues to pursue an active agenda in dispelling the stigma of leprosy and improving patients' access to treatment. Novartis and its Foundation provide free leprosy treatment through the World Health Organization (WHO) in order to help eliminate leprosy as a public health problem.

Less than a generation ago the implications of contracting leprosy in Sri Lanka were disastrous. The population believed that leprosy was highly contagious and incurable. Sufferers became the victims of both ignorance and the disease. Unable to work, often shunned by family, neighbors and friends, lepers were outcast and left to suffer disability, deformity and the ignominy of the leper colony. Sri Lanka is one of the countries in which Novartis has been supporting the local Health Ministry and the WHO in fighting leprosy and providing reliable and sustainable services which are integrated into the General Health Service. Results have been astonishing. The disease now has a prevalence rate of less than 1 in 10 000. More importantly, ignorance has been conquered, too.

Priyantha and Nihal are two brothers from Polonnaruwa, a rural district of Sri Lanka. About a year ago, Nihal noticed a strange patch on the skin of his right leg with no sensation. He didn't pay much attention to it until he noticed a similar patch on his elder brother's chest. "We just took it lightly and even teased each other by scratching each other's patches."

Their mother walked in one evening and saw what was going on. She looked at their skin and was alerted at once. She had seen a TV advertisement in which people were told to get such patches checked by a doctor, and sent Nihal to the hospital at Polonnaruwa the next day while his brother was at work.

"The doctor at the hospital told me that what I have is leprosy. He filled out a form and told me that I have to take the treatment for six months. He also gave me a booklet with a picture of a bride on the cover and instructed me to read it very carefully and conscientiously."

Nihal collected his medicine, was shown how to take the pills, given the first dose and asked to come back for the next packet in one months' time. But he did better than that. The very next day he returned with his elder brother and a friend who had similar skin patches. Both were promptly diagnosed and also given medication and booklets. Sri Lanka's health authorities were able to provide the drugs free of charge due to the support of the WHO and of Novartis. "Our parents would have had to spend a lot of money to have us treated. That could have affected our entire families."

The boys completed the treatment, and the episode is already pretty much forgotten. For the younger generation leprosy no longer holds any fear.

But Nihal and Priyantha were conscious of the very different outcome this story might have had only a few years ago. "They sent people with this disease to the jungle in the good old days," Nihal smiles wryly.

The program in Sri Lanka is considered a best-practice example as it shows ways for public authorities and private enterprises to combine their knowledge and credibility in an effective manner.

Novartis Access to Medicine Projects

Project	Start	Region	CHF millions/year	Goal	Status
Leprosy/WHO (donation)	2000	Asia, Africa, Latin America	10-15	Provide free treatment to leprosy patients in cooperation with WHO	22 million blister packs shipped since 2000 (CHF 40 million)
Malaria/WHO (at cost)	2002	Asia, Africa, Latin America	0.3 (in 2002)	Through cooperation with WHO, reach as many patients as possible	Procurement process established, only few actual shipments in 2002
***Gleevec/Glivec* patient assistance programs** (discount)	2001	Global	110	Nobody is denied access for economic reasons	3 100 cancer patients (CML, GIST)
Other patient assistance programs (discount)	1996	USA	110	Product discounts to low income patients	Over 30 different products provided to 130 000 patients without insurance coverage
Together Rx Card/ CareCard (discount)	2001	USA	40	For low income elderly without insurance	75 000 members used card, 500 000 members
Emergency relief (donation)	1996	Global	20	Support major humanitarian organizations (emergency medical needs)	Ongoing commitment
Novartis Institute for Tropical Diseases Singapore (TB/Dengue)	2001	Asia, Africa, Latin America	13	Long-term commitment to advance medical research for the developing world	Recruiting, opened
Tuberculosis (donation)	2003	Africa	2	Provide 100 000 treatments per year for 5 years	To be signed early 2003
Access program for employees (HIV/malaria/TB)	2002	Developing countries	1	Covers employees and their families	Partly implemented
Treating blindness (donation)	2001	Developing countries	1	Provide > 11 000 intraocular lenses	Project ongoing
Novartis Foundation for Sustainable Development (programs)	1979	Asia, Africa, Latin America	10	Work at the policy and local level to improve the quality of life of the world's poorest people	Ongoing external commitment and internal expertise in Corporate Citizenship
Health Alliances	1996	USA	30	Development of relationships with organizations to reach patients	Ongoing

Fighting Malaria

Large parts of the world continue to be ravaged by malaria. A joint public/private partnership between Novartis and the World Health Organization (WHO) has been established to provide *Coartem,* an innovative malaria drug developed by Novartis together with Chinese scientists, at cost to patients in developing countries.

The project with the WHO started slower than anticipated. Unfortunately, very little *Coartem* has actually been distributed to patients so far, due to inadequate medical support infrastructure or the inability of governments to redirect funds for malaria-related projects. In 2002, the WHO published the procurement process for governments of developing countries for *Coartem.* It was also decided to develop a pediatric formulation of the drug in cooperation with Medicines for Malaria Venture.

The Novartis Pharmaceuticals Division this year integrated tropical medicines into its Primary Care Business Unit. One of the problems we are facing in several developing countries is that there are many older and cheaper medicines available as alternatives to *Coartem,* and they are increasingly facing resistance problems which reduce their efficacy.

Tuberculosis (TB) and Dengue Fever

TB and Dengue fever are two tropical diseases that do not attract sufficient research funding in our market-driven world. The Novartis Institute for Tropical Diseases (NITD) in Singapore, established in 2001, was created to address such situations. Its costs of CHF 180 million for the next 10 years are being funded by Novartis in cooperation with the Singapore Development Board.

In 2002, we began with the recruitment process. So far, we have received more than 1 000 local job applications for the six positions advertised. The new institute will employ 60–70 professionals, 14 of whom will be principal scientists and a part of an international tropical disease research network. Two laboratories housed in temporary accommodation will become operational in early 2003. The permanent facility "Biopolis" is expected to be ready in early 2004.

On January 22, 2003, NITD staged its inaugural symposium in Singapore in combination with a high caliber path-finding workshop, "New Avenues," bringing together Nobel laureates such as Rolf Zinkernagel and some of the world's most promising pioneering scientists in their disease areas. Paul Herrling, President of the NITD, watched over the 60 participants engaging in a compelling, cutting-edge debate that will give some decisive impulses towards areas where our research can provide maximum benefit.

Blindness

The populations of Nepal, Tibet, Bhutan and Northern India show high rates of blindness caused by cataracts. Affiliates of CIBA Vision, a Novartis Business Unit, have donated 11 000 intraocular lenses to the Himalayan Cataract Project. The initiative teaches physicians in these countries to perform extracapsular cataract surgeries with intraocular lens implantation. With the lenses donated by CIBA Vision, the operations can be performed at no cost to the patients.

Patient Assistance Programs and *CareCard/Together Rx Card*

In 2002, the Novartis Foundation for Sustainable Development supported the creation of a locally managed micro-health care insurance in the rural Municipality of Cinzana, in the African nation Mali. The objectives are to protect people living in poverty against high financial costs due to health problems, and to improve their access to basic healthcare services.

The problem of affordability also effects population segments of industrialized countries. In the USA, for instance, approximately 40 million people are without health insurance. Among elderly people with Medicare coverage, about 14 million people are without insurance for prescription drugs. Legislative efforts are under way to include a prescription drug benefit in Medicare, but Congress hasn't agreed on a solution to date. Recognizing the gap in insurance coverage, Novartis developed the *CareCard,* introduced in 2001, which provides substantial discounts to Medicare patients whose drug purchases are not reimbursed.

In 2002, Novartis continued to develop the concept. In cooperation with other leading pharmaceutical companies, we issued the *Together Rx Card* which provides discounts on a broader range of pharmaceuticals from many manufacturers. The total volume of discounts provided by Novartis under the *Together Rx Card* program amounted to about CHF 40 million in 2002.

The introduction of *Gleevec/Glivec,* our innovative cancer drug, raised another issue related to affordability. *Gleevec/Glivec* is a life-saving drug for a form of leukemia and for a form of gastrointestinal tumor.

The number of patients is relatively small and the price of the drug is very high. In countries which do not provide comprehensive insurance coverage for their population, some patients are faced with the stark choice of spending their entire annual income to pay for the drug or accept the prospect of death. We cannot accept this. In response, Novartis has established patient assistance programs to provide coverage in situations where patients simply cannot afford the drug. Novartis' patient assistance programs for *Gleevec/Glivec* supplied patients with medicines that would have cost about CHF 110 million at the prevailing market price.

It is the responsibility of governments to provide access to drugs, but in this particular situation and others, we felt that we could not let patients suffer for government's inability to act.

Marketing Practices by Business

	Detailed booking rules	Local gifts policy	Control mechanism
Pharmaceuticals	99%	84%	96%
Generics	95%	85%	93%
OTC	95%	91%	86%
Animal Health	97%	82%	85%
Medical Nutrition	100%	100%	92%
Infant & Baby	95%	82%	82%
CIBA Vision	97%	88%	88%
Group overall	**97%**	**86%**	**90%**

Marketing Practices by Region

	Detailed booking rules	Local gifts policy	Control mechanism
USA	100%	100%	90%
Canada and Latin America	98%	81%	84%
Europe	97%	90%	96%
Africa/Asia/Australia	96%	84%	87%
Group overall	**97%**	**86%**	**90%**

Access to Treatment Program for Employees

In our companies operating in developing countries with insufficient health insurance, Novartis launched an internal program providing for prevention, diagnosis, treatment and counseling to all employees and their immediate families for HIV/AIDS, TB and malaria. In 2002, implementation started and once fully realized, this program will provide coverage to about 14 000 employees and their immediate families.

Societal Focus

Three years ago, Novartis was one of the first corporations to commit itself to the Global Compact, a remarkable initiative sponsored by United Nations Secretary General Kofi Annan. It is based on a very simple notion: whether or not required by law, corporations should enforce basic human rights and accepted labor and environmental standards in all their business activities to counterbalance possible negative effects of globalization.

At Novartis, Corporate Citizenship is firmly anchored at the Board level. The Audit and Compliance Committee of the Board of Directors oversees the implementation of Corporate Citizenship as part of the commitment to the Global Compact. Our Corporate Citizenship Policy laid down the principles of how we conduct our business. These were then further refined into guidelines addressing key aspects:

- **Management of Corporate Citizenship**
  This guideline defines responsibilities, management process and mechanisms for conflict resolution and complaints ("whistle-blowing"). It is very important that discrepancies between financial performance objectives and Corporate Citizenship goals are openly discussed. It is also essential that employees are able to raise issues with senior management without fear of reprisal.

- **Fair Working Conditions**
  This guideline focuses on the well-being of our employees. It explains our policies on paying a living wage, maintaining reasonable working hours, avoiding forced and child labor, prohibiting discrimination and respecting our employees' freedom of association.

- **Bribery, Gifts and Entertainment**
  This guideline deals with business ethics. Specifically, it defines a minimum standard of fair marketing practices that we enforce in markets around the world. Marketing practices vary from country to country. In the USA, for instance, the industry has articulated a strict code of behavior, whereas in other countries the rules of fair marketing are less precisely defined. This guideline prohibits bribery and excessive marketing expenses. To enforce this, it makes sure that no payments can take place off the record. It also mandates that gifts and entertainment for physicians should not be lavish and should primarily have an educational content or a strong focus on patients.

Working Conditions by Business

	Meetings with production staff	Meetings with employees	Grievance procedure in place
Pharmaceuticals	39%	75%	59%
Generics	35%	75%	43%
OTC	34%	68%	55%
Animal Health	35%	68%	65%
Medical Nutrition	23%	69%	31%
Infant & Baby	41%	68%	47%
CIBA Vision	41%	79%	68%
Group overall	**37%**	**72%**	**56%**

Working Conditions by Region

	Meetings with production staff	Meetings with employees	Grievance procedure in place
USA	50%	80%	100%
Canada and Latin America	40%	70%	49%
Europe	32%	78%	51%
Africa/Asia/Australia	39%	66%	62%
Group overall	**37%**	**72%**	**56%**

- **Human Rights and Engagement in Society**

This guideline addresses the difficulties of dealing with governments and officials who may be violating human rights in some countries. This guideline makes it our policy to provide support for and to protect internationally accepted human rights. The guideline also instructs our local managers to take an active interest in the affairs of the country and to maintain a good dialogue with the relevant stakeholders.

A fifth guideline on how to engage contractors, suppliers and other third parties in line with our Corporate Citizenship principles will be finalized in the course of 2003.

Implementation

In 2002, we launched a comprehensive training program to ensure that everyone in the Novartis Group is made familiar with the principles and rules of Corporate Citizenship. We expect to reach most employees by mid-year of 2003. Starting with senior management, we are gradually involving employees at all levels. About 1 000 executives have already participated in an educational workshop. The Corporate Citizenship Policy and the accompanying operational guidelines have been received by about 91% of the entire management population of 11 000.

All the units in all the countries in which we operate participated in a structured annual Corporate Citizenship reporting process for the first time in 2002. Almost 300 units were asked to report data on a variety of parameters. More than 90% of all reporting units supplied the necessary figures and analyses (see tables). Although there is no accounting standard established for Corporate Citizenship and the data quality is not yet beyond all doubt, the survey gives an overview of our global status and clear indications of possible issues.

Corporate Citizenship – Goals and Results

	Our focus in 2002	Results we achieved in 2002	Steps planned for 2003
Policy framework	Translate Corporate Citizenship Policy into practical guidelines and management standards.	Published four guidelines on the management of Corporate Citizenship: fair working conditions; bribery, gifts and entertainment; human rights and engagement in society.	Add fifth guideline that addresses relationship with third parties: application of Corporate Citizenship standards to suppliers, contractors, consultants, etc.
Access to medicine	Define key problem areas where Novartis can contribute (leprosy, malaria, tuberculosis and neglected tropical diseases). Gain practical experience on access issues in the industrialized world with introduction of *Gleevec/Glivec.*	Initiated a number of innovative programs to improve access to medicine (see list on page 38).	Strengthen priority programs such as the *Coartem/*malaria program. Complete staffing of the Novartis Institute for Tropical Diseases in Singapore.

Corporate Citizenship

	Our focus in 2002	Results we achieved in 2002	Steps planned for 2003
Working conditions	Ensure compliance with the words and spirit of the Global Compact as reflected in Novartis Corporate Citizenship guidelines.	Defined key employment standards worldwide in guideline on fair working conditions. Determined that Group companies are paying fair living wages worldwide with some open questions.	Strengthen programs to ensure fair living wage, diversity and adequate dialogue with all employees.
Fair marketing practices	Eliminate marketing practices that could potentially lead to distortions in the decision-making processes of public and private health providers, including physicians.	Defined key behavioral standards in guideline on bribes, gifts & entertainment. Assessed status of compliance with guideline through country-level reviews. In the USA, adopted new marketing standards issued by the industry association.	Implement detailed standards and procedures in markets around the world.
Respect for human rights	Ensure that Novartis behaves in full compliance with accepted human rights standards.	Verified that there are no incidents of child labor in Novartis organization. Established that Novartis is not involved with any known human rights violations.	Articulate comprehensive position covering the current human rights issues affecting the industry.
Bioethics	Define clear positions on ethically complex issues in research and development.	Developed policy on human stem cell research and related issues. Established independent ethics committee to monitor compliance with policy on human stem cells. Updated guidelines on animal rights.	Adopt revised ethical framework for biomedical research (revision of Helsinki Declaration).
Stakeholder engagement	Seek an active dialogue with key stakeholders and their representatives.	Met with leading NGOs to review positions and policy options on key health care issues. Participated in stakeholder event at Johannesburg Summit. Organized conferences on health issues in close cooperation with leading academic institutions.	Deepen relationships with leading academic institutions, NGOs and think tanks.
Accountability of management	Make managers at all levels accountable for complying with Corporate Citizenship standards.	Defined responsibilities and incorporated them into annual goal-setting process for 2003. Conducted assessment of issues existing at country level with local managers worldwide, involving about 260 business units in 70 countries.	Execute complete Corporate Citizenship management cycle including objective setting, performance measurement and year-end incentives.
Involvement of employees	Involve management and employees; convince them that Corporate Citizenship is an integral part of the Novartis business strategy.	Conducted meetings with 1 000 executives. Developed information materials (videos, presentations, web-based information) and various internal publications.	Train all employees by end of first half of 2003. Communicate Corporate Citizenship concept to external stakeholders.
Transparent reporting	Create annual reporting process to measure progress on Corporate Citizenship; give external audiences first hand insight into how Novartis goes about implementing Corporate Citizenship.	Included Corporate Citizenship section in Annual Report 2001. Reported on progress of implementation and findings of country-level review process.	Continue to improve data quality and transparency for the Annual Report 2003. Adapt Corporate Citizenship reporting on the website to GRI format (Global Reporting Initiative).
External assurance	Involve independent third party to ensure that internal reporting on Corporate Citizenship is done correctly.	Conducted independent review of Corporate Citizenship management process (see report on page 65).	Institutionalize independent assurance process.

Regional Corporate Citizenship Status

Region	Strengths	Weaknesses
North America	• Programs against discrimination • Code of Conduct online training • Expense policy and gifts policy	• Incomplete energy conservation programs • Control checks inconsistent across North America • Gender distribution in top management
Europe	• Complaints procedure institutionalized everywhere by June 2003 • Regular employee communication throughout • No HSE fines in last 12 months	• No program against discrimination in several countries • Gender distribution in top management in several countries
Asia Pacific	• Same pay for same work policy throughout • Account book controls everywhere except 1 country • No HSE related fines in last 12 months	• HSE non-compliance in some cases • No gifts policy in some countries • Gender distribution in top management in several countries
Latin America	• Programs against discrimination in most countries • 30% women in management and 44% of associates in region are women • Regular meetings with associates' representatives in most countries	• No program against discrimination in 3 countries • No gifts policy in 3 countries • No complaints procedures in several countries

Code of Conduct

Novartis adopted its first global Code of Conduct in 1999. In order to reflect the signing of the Global Compact in 2000, an amendment became necessary. The revised version of our Code of Conduct was distributed in 2001 to all Novartis Group company employees worldwide and translated into local languages.

Compliance with our Code of Conduct, which is a part of the employment terms of all Novartis employees is closely monitored. For this we have established a worldwide network of over 45 Compliance Officers who advise on compliance problems, deal with complaints and handle any arising issues. Their reports are consolidated by the Group Compliance Officer into a yearly Compliance Report addressed to the Audit and Compliance Committee of the Board.

Issues and Problems

As might be expected for a Group with more than 70 000 associates, Novartis had its share of issues and problems to deal with in 2002. Reported cases related particularly to discrimination and harassment, conflicts of interest, inappropriate marketing practices and some inappropriate payments. Sanctions resulting from such infringements included 18 dismissals.

Code of Conduct Survey Results

This annual survey, conducted this year with more than 3 500 associates, provided additional insight into the acceptance of the Code. The results show that there is a high awareness of the Code. More than 80% of the respondents felt adequately or very familiar with the contents of the document. More than half, however, felt that they lacked sufficient training regarding the detailed implementation in their daily work of the principles laid out in the Code.

Outlook

The key findings of both the compliance reports and the surveys are that the Code is very well accepted and its principles are considered as the appropriate way to behave and to conduct business. Reports and comments range from "established and absolutely uncontested" in a Scandinavian country to "an excellent initiative since the government has just launched a mega action against corruption" in an African country. All in all, Novartis is essentially compliant with the Code, but it will require constant management attention in all critical fields and countries to maintain this status.

In 2003, we will focus on the needs for action shown in the surveys and in the reports. New training tools will be created and training programs for associates have already been launched. Professional training of the members of the compliance organization will be intensified. The main challenge will be to continue creating an open climate of discussion and reporting, thereby ensuring that problems and cases can be discussed and reported without fear of retaliation. Another planned activity relates to the complaints procedure, the right of all associates to complain to the Compliance Organization about violations of the Code of Conduct. Experience has shown that the awareness of the existence of such procedures diminishes over time and suitable activities will be taken to ensure that associates are regulary reminded of its existence.

The above data and assessments are analyzed by Group management as part of the established Corporate Citizenship management process. This includes assigning responsibilities, setting targets and measuring progress. Of course it may be embarrassing for some organizational units to report on negative findings or statistics. For this reason we believe that our respondents should be commended for their openness and courage. As for those who may have preferred to look the other way, we will strongly encourage them to follow these examples. Living up to the standards of Corporate Citizenship will certainly require a sustained internal learning process, a culture of open debate and constant management attention.

The Novartis Foundation for Sustainable Development

For more than 20 years a leading private-sector think tank on international development and humanitarian issues, the Foundation also runs a variety of programs to promote social development and improve the health of poor people in developing countries. The Foundation is a registered non-profit organization, and its work is fully financed by the Novartis Group. The Foundation carries out development work independently from the business activities of the company.

Why?
Today more than 1.5 billion people are living in absolute poverty, and between 13 and 18 million people – mostly children – die every year from the effects of hunger, poverty and preventable diseases. At the same time, the social gap is widening, not only between industrialized and developing countries, but also within countries themselves. The simultaneous existence of two worlds – one affluent and the other afflicted by poverty and disease is not only unacceptable from a moral point of view, but is also politically explosive.

Novartis believes that by bringing together competence, resources and personal commitment, a significant contribution can be made to addressing the immense problems of poverty, disease, and underdevelopment. Top management at Novartis remains convinced that companies can play a useful role in these fields. The Novartis Foundation is one expression of the company's commitment to global development and peace.

What?
The Foundation strives to contribute to a sustainable improvement of basic living conditions of the poorest people in developing countries and focuses on health and social development problems. Actual project and program work include:

- Fighting leprosy through free provision of drugs, social marketing campaigns and improved access to diagnosis and treatment
- Empowerment of women, AIDS orphans and young people
- Community development in both urban and rural areas
- Promoting improved access to basic health care services, e.g. through informal health insurance schemes and tailor-made access to treatment programs

The Foundation also aims to help in the formulation and shaping of development policies in order to reduce poverty and social inequalities. This is done through a synergistic approach of research, information and advice on development policy and practical development work. A large number of publications have been produced in the course of our research work.

Events
The Novartis Foundation holds regular discussion meetings, symposia, workshops, seminars, lectures and talks on development issues that are of general interest. The events include an annual international symposium (www.novartisfoundation.com/symposium) and "Basel Food for Thought" (www.baslerdenkanstoesse.ch), at which well-known personalities discuss issues of current concern.

Advisory Work
The Novartis Foundation for Sustainable Development is a member of the advisory boards of several governmental and international institutions as well as nongovernmental organizations (e.g. UNDP, Swiss Agency for Development and Cooperation, and the World Bank).

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Other Novartis Foundations

Novartis US Foundation	Its purpose is to support efforts among communities, businesses and nonprofit organizations on a range of social, health and education issues related to healthcare.
Novartis Foundation France	The Novartis Foundation France provides persons with difficulties due to age, illness, handicap or family environment with personal and social support.
Novartis Foundation Japan	The Novartis Foundation Japan contributes to the improvement of welfare, by aiding and promoting creative research and pursuing international exchange.
Foundation for Health, Innovation and Society (Spain) www.fundsis.org	The foundation promotes the study, investigation, analysis and improvement of health in its ethical, biological, psychological, sociological and economical dimensions.
Novartis Venture Fund www.venturefund.novartis.com	The Novartis Venture Fund supports new business projects that show exemplary enterpreneurial spirit in future-oriented health science areas.
The Novartis Foundation (UK) www.novartisfound.org.uk	The Novartis Foundation (UK) is a scientific and educational charity, intended to promote scientific excellence.
Novartis Foundation for Gerontology www.healthandage.com	The Novartis Foundation for Gerontology aims to support healthy aging through Internet-based education.

...anticipating nature...

Peradeniya Botanic Gardens, Kandy, Sri Lanka

Animal Welfare

If Patient Safety is Non-Negotiable Then Some Animal Testing is Essential.

Ask anyone in the street about animal testing for pharmaceutical research. The replies will range from full support to the active disapproval of interest groups. There is a commonly held image of a lonely animal cowering at the back of a small cage suffering the side effects of a hundred drug experiments.

Animals continue to play an essential role in the development of the drugs that bring hope to many patients around the world. The ethical balance between the dignity of the animal and the need for medical progress, however, is very fine indeed. Nowadays research animals are well taken care of, and a great deal of attention is paid to improving their quality of life.

Is there really still no alternative to animal testing? Although much development can be done in vitro, the efficacy of a treatment will eventually have to be studied in the body of an animal because it represents more than the complex sum of all the various single tests. It is necessary to satisfy international conventions and health authority regulators that a drug is both effective and safe for human use.

There has been an extraordinary decline in the numbers of animals used in the pharmaceutical industry. For Novartis Switzerland, this means a reduction by 85% in the number of animals used between 1980 and 1997, and by a further 8% between 1998 and 2001. This decline is due to better testing methodologies and the use of alternative organisms. Nevertheless, given that some animal testing will continue to be inevitable, a transparent and open approach is required from pharmaceutical companies to answer some of the charges leveled by public concern.

This openness will demonstrate that a further reduction of testing is not possible, and that the highest standards of animal welfare and good scientific and ethical practice are being enforced. This is the case, for example, at the new Novartis Institutes for Biomedical Research Inc. at Cambridge, Massachusetts. A 24-hour, 365-day open-door policy to state animal welfare officers is being put in place, which is in accordance with our Novartis policy and has been in practice in Switzerland for many years. The idea is to create an open environment in which to develop animal welfare expertise.

Evolution of Facilities

Animal welfare has certainly developed over the past 30 years. In the 1970's, laboratory monkeys were housed individually in small single cages. These Rhesus monkeys were considered to be aggressive, territorial and prone to shows of strength. Separation was thought to be essential. Then an experiment in pairing resulted in a successful partnership, and two cages were joined to create a shared home. From that moment on, things changed and subsequent pairings led to the evolution of the facilities. Now, at Novartis, the housing groups span different generations, which has undoubtedly added to their stability and contentment. Leading off their rooms, each group has an open area with perches so that the vertical space can be explored, and windows to create extra interest.

Preference tests have been conducted to establish a favorite diet, and rice, beans and peanuts are strewn around the open enclosures to encourage foraging.

In a more natural social setting, the emerging hierarchies sometimes create intra-group aggression. Environmental enhancements have included physical obstacles, which allow the animals a safe retreat when needed.

Minimizing Stress

The essential concern now is to improve the animals' psychological well-being. Of course this benefits the animals themselves, and it also improves the quality of our scientific results by decreasing levels of stress. Animals now have care givers with whom they develop long-term relationships. For example, care givers reassure the animals when routine blood tests are being made and reward them with a treat afterwards. All necessary measures for sedation, analgesia and anesthesia are used to ensure minimum discomfort, distress or pain levels for the animals on every occasion. These measures are used to a level that a modern hospital patient might expect.

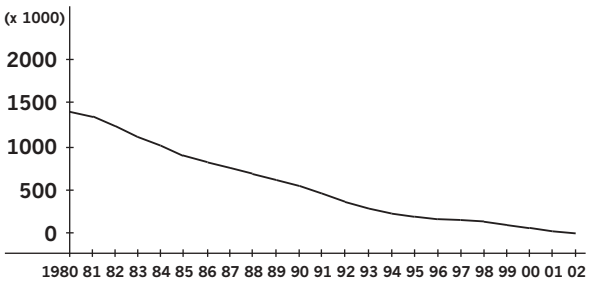
Animals spend only a small percentage of their lives in tests. They are specifically bred for research purposes and trained normally. Before tests begin they are well cared for and kept in good health. Dogs for example are left with their mothers for six weeks and are then trained with their siblings. They are kept together, which they evidently continue to enjoy later on.

Drugs Against Frightening Diseases

Progress down the road of discovery is becoming faster and faster. Forty years ago the idea of organ transplantation seemed extraordinary. Today Novartis is the world-leading supplier of the drugs that enable transplantation to save, extend or improve thousands of lives across the continents every week. In cancer, heart disease, immunology and many other fields, Novartis is developing products to improve quality of life for patients and their families. With every successful product launch, every "miracle drug," expectations are being raised about the ability of medicines to achieve the unachievable. We are looking for new drugs to beat the most frightening diseases we know. A large proportion of this work is simply not possible without the help of animals. Novartis is committed to a reduction in the number of animal tests carried out, and to improvements in animal welfare where reduction is not possible.

Ask anyone on the street for his or her opinion of modern animal testing. Ask the same person for an opinion about advances in medical science … especially if they have some recent, first-hand experience.

Animals in Research 1980–2002, Novartis Switzerland



...safe steps...

Novartis Pharmaceutical Production, Stein, Switzerland

Health, Safety and Environment

This section summarizes the Group's Health, Safety and Environmental (HSE) performance in 2002. The full Novartis HSE report is provided on our web site at www.novartis.com/annualreport2002. That site also has additional detailed information on all the issues and items mentioned in this Annual Report.

HSE and Corporate Citizenship

The health and safety of our employees, neighbors, customers, consumers and all others affected by our business activities, as well as the protection of the environment, have priority in all our activities.

In 2002, our corporate HSE targets were again focused on the reduction of accidents and energy use (CO_2 emissions) safe disposal of hazardous waste and ensuring the safety of landfills historically linked to our predecessor companies. This report summarizes the most important measures undertaken to fulfil our ambitious corporate targets, and discusses our achievements, as well as areas in which we can improve.

Measures for Safety

In 1992, HSE personnel at the CIBA Vision production facility in Sendai, Japan, embarked on a structured long-term plan to improve safety standards for the 16-year-old site. A decade later, what started out with low profile repairs and a seemingly unspectacular awareness campaign added on for good measure has turned into a notable success story. The Sendai site has achieved 10 years without a lost-time accident, a milestone in occupational accident prevention. The success formula: a modest but relentless program of steady and very tangible improvements to the 1 000 m^2 site and to many production processes, combined with comprehensive clarification of all HSE-related responsibilities.

Initially, reviews of the site infrastructure and machinery led to various noteworthy changes: the surfaces of passageways and corridors were leveled and inconspicuous obstacles and protrusions removed. The installation of heavy goods elevators and various machines helped to reduce the physical burden on the staff. Next, automatic over-heating prevention systems were introduced, while glass vessels for chemical reactions disappeared to be replaced by stronger metal versions. Then, step by step, all the moving parts of machines were systematically covered with protective shielding, and remote-controlled systems and robots were brought in to take over laser-marking and various cutting processes. The installation of an automated conveyer system and a new safety control system marked the latest improvement to the site's infrastructure.

Simultaneously, the staff at Sendai undertook a number of environmental safety measures, such as the introduction of oxygen alarm systems in inert gas treating rooms, regular checks of solvent vapor concentrations in operation rooms, and the development of a closed automated system for the solvent-washing process for lenses and a non-solvent washing method for the parts.

None of these measures would have achieved the desired result without rigorous reassignment of process and unit responsibilities. And, last but not least, the Sendai safety program was accompanied by regular communication activities, keeping the organization sensitive to quality controls and safety-enhancing endeavors and reinforcing awareness of the system of checks and controls.

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No Longer Learning the Hard Way

Over the past 10 years, Biochemie S.A., Spain, one of our Generics business subsidiaries, has been reporting unduly high accident figures between two and three (measured as accidents per 200 000 hours worked, or lost-time accident rate (LTAR)). Although slight improvements regarding the LTARs were achieved in some years, the goal of 1.0, and more recently 0.8, was still not reached. To improve the situation, two years ago Biochemie S.A. started a new process safety and risk management program, designed to complement all previously initiated activities. The main focus of the campaign was on generating basic awareness for safety issues. Employee inspections and regular on-site communications with the workers are an essential feature of the safety program. These communications include regular Monday morning safety meetings with

management, department-wide meetings on safety issues across the company and posters to remind employees of specific issues on location.

So far, a record figure of over 380 days without a lost-time accident has been reached.

While we are aware that achieving this success included an element of luck, it is very clear that the safety awareness programs in Spain and Japan have had considerable impact and that they inspire others to follow suit.

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Awards to Other Novartis Sites for Safety Achievements

Awarded site/country	Award	Achievements
Novartis Grimsby Ltd., UK	One of only 18 sites to be presented with the UK Chemical Industries Association (CIA) Diamond Award at a ceremony in London last July. The award, which recognizes sustained excellent performance in occupational safety goes to sites which achieve the annual CIA safety award for 10 consecutive years (lost time accident frequency rate less than 0.25 per 100 000 hours worked).	• Management support and commitment • Positive safety culture • Robust standards and procedures • Inspection and monitoring • Training • Visible performance indicators • Promotion, reward and recognition • Accident/incident reporting and investigation
Novartis Infant & Baby Cartago, Costa Rica	Premio Global Preventico 2002 Savings of USD 9 000 per year in insurance rates.	• Quality System certified as ISO 9002 • Annual HSE training course for all employees • Internal audits conducted at least once per year
Gerber, Ft. Smith, USA	"1 Million Hours Worked Award" from Arkansas Dept. of Labor, Arkansas Worker Comp Commission and the Arkansas Insurance Department.	• Improved monthly safety training • Increased focus on "the shop floor" by management and HSE teams • Management of injured employees

Helping Our Neighbors with the Heating

The largest antibiotics manufacturing facility of our Generics affiliate, Biochemie GmbH, in Kundl, Austria reports energy savings of 43 000 Giga Joules (GJ) in 2002. This was achieved by installing a three-step heat recovery system in the plant, at a cost of Euro 600 000. Benefits of this investment will become even more apparent by 2005 when the effective annual energy reduction is expected to reach 72 000 – 100 000 GJ/year. This corresponds to 3 900 – 5 420 tonnes of CO_2 per year, which is 5.6 – 7.7% of the site's CO_2 emission. In addition, heat generated as a by-product of antibiotic production has been used very effectively for years in Kundl to cover local heating needs.

More Energy Efficient Ampoules and Vials

Energy consumption in one area of our pharmaceutical manufacturing site in Stein, Switzerland, was reduced by 600 GJ/year by utilizing the heat created during production of sterile vials for room heating. And because conventional "clean rooms" for sterile manufacturing need high volumes of climatized air, equipment was installed to create separate air compartments, thereby greatly reducing the amount of conditioned air required.

The result: an additional 55% reduction in energy consumption. The new manufacturing process uses only 38% of energy consumed by conventional techniques.

Corporate and Division/Business Units Goals for 2002–2003

	Targets 2002	Results 2002	New targets 2003
Pharma-ceuticals			
	Overall lost-time accident rate (LTAR) 0.5	Not yet achieved; LTAR 0.65, but positive trend emerging	Ongoing; LTAR 0.5
	Prevent drug substance releases in manufacturing processes	Extensive review of all manufacturing processes has led to a revision of several important production procedures	Ongoing task; plus additional focus on releases into aquatic environment
	Implement HSE management system in line with international standards	On-track: ISO 14001 or EMAS certification renewal at: Barbara (Spain), Wehr (Germany), Ringaskiddy (Ireland), and first part certification audit according to OHSAS 18001 in Barbara (Spain)	Ongoing task
			Business Continuity Management (BCM) integration in Development, technical operations and BUs
Consumer Health			
Generics	LTAR < 0.9	LTAR 0.90	LTAR <0.8
	Project in Kundl to reduce Group CO_2 emissions by 1.6% (based on 2001)	(please refer to story on page 50)	Further reduction of energy consumption in Kundl by 70 000 GJ
	50% reduction of halogenated VOC solvent emissions in Europe	50% in absolute values	Staged 50% reduction of hal. VOC emissions in Turbhe, India, by 2004
			Successful integration of Lek, Slovenia; i.e. achieve HSE standards applied to our other Generics businesses by 2005
OTC, Medical Nutrition, Infant & Baby	LTAR 0.7	Achieved LTAR 0.61	LTAR (OTC + I&B) 0.45 LTAR (MN) 1.0
	Energy reduction relative to production	Achieved at 4 sites	Ongoing; 5 additional sites identified for energy reduction
	Improve risk portfolio of third party contractors	Third party contractor risk portfolios completed and HSE/quality pre-assessment in progress	Complete 4–6 audits of third party contractors
			Pilot implementation of BCM and a global roll out
Animal Health	LTAR < 0.5	Not yet achieved; LTAR = 0.56, but positive trend emerging	Ongoing; LTAR < 0.5
	Evaluate and improve third party contractors' risk portfolios	Risk control improved for several third party contractors with high impact	Continue to improve risk control of third party contractors
		Guidelines for third party manufacturers established regarding safe handling and processing of solids and agreed by them	
			Implement BCM and the manufacturing & supply chain of five active ingredients
			Energy, SO_2 and CO_2 reduction at Wusi Farm, China

	Targets 2002	Results 2002	New targets 2003
CIBA Vision	LTAR < 0.7 plus reduction of 10% at every site	Achieved LTAR 0.67	LTAR 0.6
	Continue water conservation program	Water conservation successfully continued	Expand water conservation program
	Study potential CO_2/energy reduction	Done but no major opportunities found	Energy efficiency improvement target to be established
	Review risk analysis at all sites	Risk analysis of top 3 processes conducted at all site	Conduct 3 additional risk analyses & establish plan for remainder at each site
Corporate			
	Implementation of risk reduction measures	Long term risk reduction plans developed by Divisions and Business Units	Further risk and liability reduction by implementing BCM methodology and product benefit/risk assessments at group level
	Global HSE standards for suppliers based on our Corporate Citizenship Policy	Recommendation of criteria has been promulgated and widely accepted	Elaborate guideline for third party management based on our Corporate Citizenship initiative
	Systematic training approach in HSE	"Virtual HSE University" launched	Institutionalize "Virtual HSE University"
	Define KPIs for HSE	HSE-training compliance and audit follow-up rates defined; financial KPI for HSE not yet defined due to methodological difficulties	Defining and implementing KPI for HSE based on GRI
	Review Group waste disposal practices to eliminate the risk of environmental damage from waste disposal	The review revealed no major problems in our waste disposal practices	Specific weak points regarding waste disposal will be followed up in 2003 on a site basis
	Continue to achieve long-term corporate targets (LTAR, CO_2 reduction and reputation rating)	LTAR and long-term CO_2 target on track, good reputation ratings achieved	Achieve long-term HSE goals for 2003: 0.5 LTAR, 3% reduction of CO_2 (based on 2000)

Glossary

BCM	Business Continuity Management
BU	Business Unit
CO_2	Carbon dioxide
Div	Division
EMAS	Eco-Management and Audit Scheme
EMS	Environmental Management System
GJ	Giga Joule
GRI	Global Reporting Initiative
hal	Halogenated
HSE	Health, Safety and Environment
I&B	Infant & Baby Business Unit
ISO	International Organization for Standardization
KPI	Key Performance Indicator
LTAR	Lost-time accident rate
MN	Medical Nutrition Business Unit
NEM	Novartis Emergency Management
NO_2	Nitrous dioxide
NOx	Nitrous oxides
OHSAS	Occupational Health & Safety Administration System
OTC	Over-the-Counter Business Unit
SO_2	Sulphur dioxide
SOx	Sulphur oxides
VOC	Volatile organic compound

Remediation

Because past operations may have led to the contamination of soil and groundwater, Novartis has established financial reserves of CHF 229 million for estimated environmental liabilities. In and around Basel, the local chemical industry (including predecessor companies of Novartis) established an organization to proactively look for timely solutions for the possible consequences of past disposal practices at a number of landfills. The objective of this organization is to eliminate acute and long-term risks through eco-efficient, pragmatic measures utilizing state-of-the-art technology, which are developed in cooperation with the authorities, and are based on professional studies and assessment. In 2002, risk assessments for several landfills in France and Switzerland were conducted.

HSE Management System and Organization

Since the merger creating Novartis in 1996, we have focused on integrating our HSE procedures into all business processes. The Corporate HSE organization (8 people), together with Division and Business Unit HSE personnel (15 people), have focused their efforts on the following areas, each of which is an integral part of our Corporate Citizenship commitments.

Third Party Management

We are aware of our dependence on the cooperation of our third party contractors and manufacturers in guaranteeing the integrity of Novartis standards (Corporate Citizenship Policy, Corporate HSE Guidelines) and on the traceability of components and ingredients. Our target for 2003 is to elaborate and implement a guideline for third party management in the context of Corporate Citizenship in order to complete third party contractor risk assessment and risk portfolio analyses, and to define and take necessary follow-up actions.

Business Continuity Management (BCM)

Novartis is aware that we are facing a variety of risks at the strategic and operational level regarding possible unavailability of the key resources necessary to support essential business processes. Each risk needs to be assessed for likelihood of occurrence and business impact. Since 2001, Novartis Pharmaceuticals has been working to implement a structured, systematic process to pro-actively manage all significant business risks by taking preventive measures. The process is completed once we have designed strategies to be followed in case a risk event does occur, which will ensure timely business resumption. The BCM also helps us to maintain our high standards in Novartis Emergency Management (NEM). In 2003 and coming years we will expand the systematic approach to all organizational units.

HSE Risk Performance Management

Since 1997, Novartis sites have been managing their local risk portfolios, and since 1998 we have consolidated the locally produced data at Group level, thus compiling our Corporate risk portfolio. This is regularly presented to and discussed with the Executive Committee (ECN) and the Board of Directors.

In May 2002, 74 risks warranting priority action plans were reported to the ECN. These primarily included risks associated with potential fires, the destruction of research data and/or infrastructure, as well as dust explosions and earthquakes, for example. Most risks attributable to tank storage and toxic gases are no longer included due to the many risk-diminishing safety improvements we have made in recent years. Only liquid ammonia in cooling units retained a priority risk rating and measures to change this are well underway. In May 2002, 18 of the 74 identified priority risks were removed from the list as a result of the actions taken to correct them. Action plans for all remaining priority listed risks have been developed and are currently being implemented. The next comprehensive risk review at Group level is scheduled for the second quarter of 2003.

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HSE Performance and Data Management

Globally, we now have over 400[1] dedicated HSE Specialists at our sites who are constantly analyzing our risk portfolio and driving the resulting action plans forward. Together with Senior Management and their local organizations they have defined key performance indicators (KPIs) for Novartis' HSE-related objectives. The KPIs are based on the data input of 117 sites managed by Novartis Group companies in 2002. These include all sites that significantly impact the Group's overall HSE related performance (i.e. all production, formulation and R&D sites). Five newly-acquired sites were integrated in 2002, primarily into CIBA Vision, while four sites were sold or closed, mainly impacting OTC, Medical Nutrition and Infant & Baby.

HSE data is collected and reviewed on a quarterly basis. The published HSE data in this report and on our website contain actual data for the period from January through September 2002 and estimates for the last quarter. The accident and financial data are actual data from January through December 2002. These 2002 figures will be updated with actual data in the first quarter of 2003. Significant deviations will be reported on our website and in next year's Annual Report. The data collection process and performance system is part of the Corporate Citizenship assurance process, which is described in the assurance report contained in this Annual Report.

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In gathering this data, we take into account impacts originating inside the fences of our sites together with major material flows across these boundaries. We currently do not measure impacts from the manufacture of purchased goods, energy and transportation by third parties.

In 2002 we paid CHF 20 000 in HSE-related fines and we had 9 cases of non-compliance with HSE regulations.

Novartis is conducting life cycle assessments (LCA) of selected products and services on a case-by-case basis. Due to the many intangibles in health value assessment of pharmaceutical products and the regulatory impact on many aspects of a pharmaceutical's life cycle, Novartis has not implemented a systematic LCA-management system.

Air Emissions

- In 2000, Novartis set a three-year target to achieve a 3% absolute reduction in CO_2 emissions through process optimization, technical improvements, energy efficient new installations and improvements in the energy mix (currently: electricity 39%, gas 35%, steam 9%, fuel oil 8%, miscellaneous 9%).
- Novartis Group performance compared to 2001: CO_2 up by 1% (Generics +7%, OTC, Medical Nutrition and Infant & Baby -22%, Pharmaceuticals +14%) due to use of more light oil and gas instead of electricity. However, compared to 2000 we still have a reduction of 3%.
- SO_2 down by 50% due to investments in the OTC, Medical Nutrition and Infant & Baby production facility in Mexico.
- Halogenated VOCs are down by 48% due to process improvements in the Generics production facilities in Rovereto, Italy, and Mahad, India, as well as production changes in the Pharmaceuticals production facility at Grimsby, UK.
- VOC non-halogenated up by 23% due to substitution of halogenated VOC by less critical non-halogenated VOC in the Generics and Pharmaceuticals production facilities at Mahad and Grimsby, and a production increase in Pharmaceuticals plants generally.

Waste

- Waste quantities are largely related to production volume and product yield, which were partly estimated for last year's figures. In this report the 2001 waste data are restated to represent actual data. Our waste reduction strategy is to first prevent, then reduce, recycle or safely dispose of waste, in that order.
- Novartis Group: The production related non-hazardous waste is down by 17%. The demolition of a building in Basel led to a substantial increase in the treated waste category.
- Hazardous waste up by 17% due to Pharmaceuticals and Generics' production mix change and increase in production.

[1] Compared to 2001, security staff are no longer included

...time out together... Novartis Pharmaceuticals Production, Stein, Switzerland

2002 Data

Divisional split based on 2002.

	Pharmaceuticals Division		OTC, Medical Nutrition, Infant & Baby	
	2002	2001	2002	2001
Employees				
HSE Personnel [number of employees working at least 50% for HSE]	**207**	**230**	**116**	**169**
Finance				
HSE investments [CHF millions]	**35.8**	23.6	**4.10**	9.50
HSE expenses [CHF millions]	**145**	143	**16.8**	21.50
Production				
Total production [1000 t = metric tons]	**27.2**	27.7	**515**	535
Resources				
Water consumption [million cubic meters]	**19.1**	**19.4**	**7.28**	**9.57**
Energy consumption [million GJ]	**6.72**	5.99	**2.93**	3.41
Health/safety				
Lost time accident rate [accidents per 200 000 hours worked]	**0.65**	0.68	**0.61**	0.81
Lost work day rate [lost days per 200 000 hours worked]	**13.6**	12.3	**11.7**	13.1
Water emissions[1]				
Effluent discharge [million cubic meters]	**4.36**	4.32	**4.02**	4.87
Suspended solids [t]	**277**	263	**60.3**	127
Chemical oxygen demand COD [1000 t]	**0.44**	0.47	**0.26**	0.84
Nitrogen [t]	**125**	91.3	**8.00**	10.0
Phosphate [t]	**60.9**	31.9	**8.87**	6.14
Soluble salts [1000 t]	**11.5**	8.40	**0.39**	0.07
Sum of heavy metals [t]	**0.19**	0.46		
Air emissions				
Carbon dioxide [1000 t][2]	**214**	188	**116**	148
Sulphur dioxide [t][2]	**42.2**	75.9	**37.0**	115
Nitrogen oxide [t][2]	**199**	190	**88.9**	116
Particulates [t][2]	**12.7**	10.4	**17.1**	19.6
Hydrochloric acid [t]	**1.85**	1.81	**0.00**	0.00
Ammonia [t]	**0.01**	0.00	**0.48**	0.48
Volatile organic compounds (VOC) halogenated [t]	**17.9**	25.2	**0.02**	0.02
Volatile organic compounds (VOC) non-halogenated [t]	**493**	387	**18.0**	23.1
Waste[3] **[1000 t]**				
Non-hazardous waste generated [t]	**53.4**	**24.9**	**91.1**	**158**
Recycled [t]	**11.5**	11.4	**54.1**	133
Treated [t]	**36.0**	7.86	**2.92**	3.16
Disposed of [t]	**5.92**	5.55	**28.9**	15.3
Hazardous waste generated [t]	**54.2**	**46.0**	**0.38**	**0.30**
Recycled [t]	**12.6**	12.0	**0.01**	0.02
Treated [t]	**38.5**	31.9	**0.35**	0.24
thereof incinerated [t]	**37.2**	30.2	**0.27**	0.21
Landfill [t]	**2.84**	1.85		0.01
Other disposal [t]	**0.01**	0.05		0.02
Intermediate storage [t]	**0.25**	0.26	**0.00**	0.00

Table shows absolute values with three significant digits; 0.00 signifies values below 0.005. Where no figures have been quoted, no data is available.

[1] To waste water treatment plant excluding cooling water
[2] Calculated based on energy breakdown

Consumer Health Division							Novartis Group[4]		
Generics		CIBA Vision		Animal Health		% change			
2002	2001	2002	2001	2002	2001	2002/2001	2002	2001	2000
76	**67**	**25**	**15**	**23**	**21**	**-11**	**447**	**502**	**445**
10.7	8.80	**1.67**	4.25	**0.60**	0.40	**-5**	**53.0**	55.6	55.1
39.8	37.7	**10.6**	7.20	**3.70**	3.80	**1**	**216**	213	244
99.8	86.8	**17.8**	17.5	**3.22**	3.97	**-2**	**663**	671	692
62.7	**59.7**	**0.74**	**0.64**	**0.46**	**0.41**	**1**	**90.3**	**89.8**	**88.0**
5.03	4.79	**0.82**	0.61	**0.14**	0.12	5	**15.6**	14.9	14.4
0.90	0.88	**0.67**	0.59	**0.56**	0.67	-5	**0.68**	0.72	0.93
7.65	11.6	**10.3**	8.75	**7.50**	6.26	4	**12.3**	11.8	14.4
11.6	11.2	**0.71**	0.53	**0.11**	0.11	**-1**	**20.8**	21.0	19.6
200	223	**3.93**	3.40	**6.81**	10.3	**-13**	**548**	627	609
3.74	2.86	**0.04**	0.04	**0.00**	0.01	**6**	**4.50**	4.22	4.11
303	301	**0.24**	0.48	**0.00**		**8**	**435**	403	505
18.4	22.5	**0.72**	0.80	**0.00**		**45**	**88.7**	61.4	97.0
12.1	11.7	**23.0**	0.07	**0.00**		**19**	**24.0**	20.2	20.8
	0.00		0.00			**-58**	**0.19**	0.46	0.32
114	107	**6.78**	4.65	**4.97**	4.36	**1**	**455**	452[5]	469
79.8	165	**0.34**	0.42	**35.3**	31.5	**-50**	**195**	388[5]	328
91.9	85.5	**5.71**	7.13	**7.11**	5.78	**-3**	**393**	405[5]	415
1.84	3.02	**0.16**	0.47	**6.12**	4.68	**-1**	**37.9**	38.1[5]	65.9
3.37	2.57		0.00	**0.01**	0.01	**19**	**5.23**	4.39	4.87
0.00	0.00		0.00	**0.02**	0.02	**2**	**0.51**	0.50	1.12
320	614		23.3	**17.2**	19.0	**-48**	**355**	682	436
688	575	**18.8**	0.58	**0.90**	5.58	**23**	**1 220**	991	849
13.6	**11.5**	**6.05**	**4.92**	**0.76**	**0.76**	**-17**	**165**	**200**[5]	**197**
6.73	8.91	**1.59**	0.51	**0.18**	0.23	**-52**	**73.9**	154[5]	127
1.37	0.48	**0.45**	0.51	**0.04**	0.03	**239**	**40.8**	12.0[5]	11.8
5.51	2.13	**4.01**	3.03	**0.54**	0.46	**69**	**44.9**	26.5[5]	55.3
17.5	**15.5**	**0.20**	**0.13**	**0.52**	**0.49**	**17**	**72.8**	**62.4**[5]	**51.2**
5.31	6.11	**0.00**	0.00	**0.01**	0.05	**-1**	**18.0**	18.2[5]	13.2
10.0	7.66	**0.19**	0.10	**0.50**	0.44	**23**	**49.5**	40.3[5]	35.4
8.38	6.35	**0.15**	0.10	**0.50**	0.43	**25**	**46.5**	37.3[5]	31.5
2.06	1.66		0.00			**39**	**4.91**	3.52[5]	2.86
0.14	0.00		0.00			**88**	**0.15**	0.08[5]	0.11
	0.00		0.00	**0.00**	0.01	**-11**	**0.25**	0.28[5]	**0.22**

[3] Difference between generated and handled waste due to treatment of waste in the current year stored in previous years
[4] Including Group functions
[5] Restatement of 2001 estimates of emissions from boilers and waste to actual figures

Resource Consumption: Energy and Water

- Novartis overall: energy usage increased by approximately 5%, mainly due to new production mix; water consumption up 1% due to Generics' production increase and new CIBA Vision sites.
- Water saving at CIBA Vision's Johns Creek Manufacturing Plant: effluent discharge decreased from 130 000 to 73 000 gallons per day, while production was increased from 17 to 26 lines. During this time water recycling increased from 87 000 to 138 000 gallons per day.

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Accidents

With a lost-time accident rate of 0.68 in 2002, we have a fair chance of achieving our ambitious LTAR target of 0.5 in 2003. We sincerely regret the occurrence of a fatality, the result of an automobile accident. Our sympathies go to family and friends of the deceased.

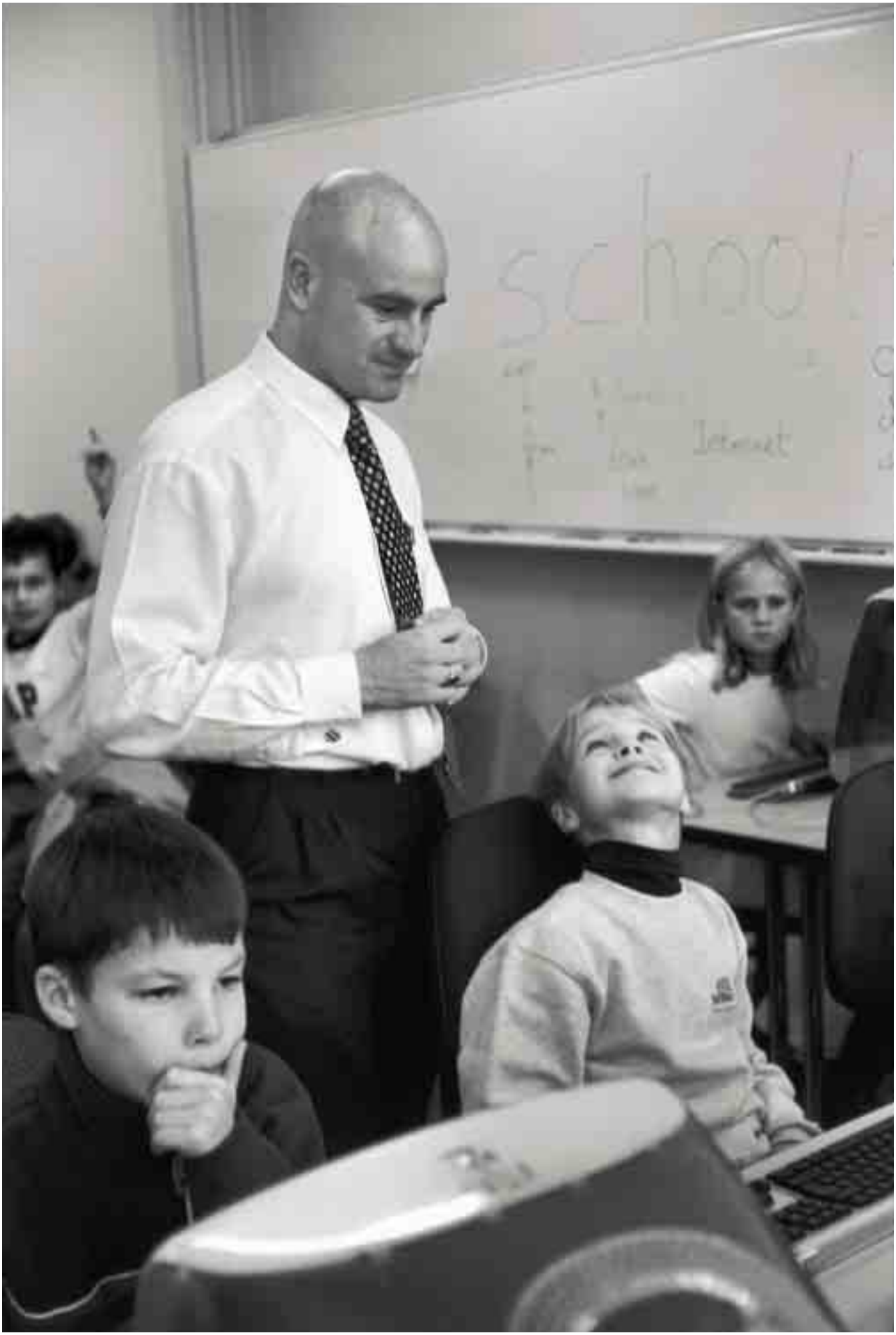
External Ratings

Leading sustainability analysts rate Novartis consistently among the leading companies in sustainability performance:

- Banks/investment companies: Storebrand, Sarasin, Ethos
- Rating agencies: SAM, Oekom (Europe); Innovest (USA)
- Consultants: SustainAbility, Deloitte&Touche

Ratings have consistently improved over the last 5 years. The observed positive five year tendency is certainly reassuring but there is as yet a lot to be done.

Dow Jones Sustainability Index (DJSI) and Dow Jones STOXX Sustainability Indexes (DJSI STOXX) stated:
"Novartis AG has an overall sustainability performance that positions it amongst the sustainability leaders of its industry. This is supported by Novartis' high level of engagement across all three corporate sustainability dimensions. Novartis' management capabilities in the economic dimension are among the best in the industry. This is underlined by a particularly strong performance in Corporate Governance and risk and crisis management systems. In the environmental dimension, Novartis scored significantly above the industry average with a clear out-performance in environmental management systems. Moreover, Novartis performed among the best, in the social dimension, particularly in management attention to human resources and public reporting."



Human Resources

Employees by Region and Business at December 31, 2002

	USA	Canada and Latin America	Europe	Africa/Asia/ Australia	Total
Pharmaceuticals	11 148	4 332	21 153	7 477	44 110
Generics	907	721	4 355	1 949	7 932
OTC	876	245	1 845	831	3 797
Animal Health	524	284	849	561	2 218
Medical Nutrition					
(including Nutrition & Santé)	729	64	1 724	184	2 701
Infant & Baby	2 263	1 991	610	37	4 901
CIBA Vision	2 482	1 314	1 341	866	6 003
Corporate	414	34	718	49	1 215
Total	**19 343**	**8 985**	**32 595**	**11 954**	**72 877**

Global Talent Management

Over the past few years we have focused on creating a performance-driven culture. We have strengthened our talent pool in every area – managerial, commercial and research and development. We now have strong learning curricula in place, in partnership with the world's finest business schools, including Harvard, Stanford, INSEAD and IMD. In 2002 over 3 000 of our managers worldwide benefited from a Novartis-specific training or development program.

The Novartis Institutes for Biomedical Research, Inc. (NIBRI) in Cambridge, Massachusetts, is fast becoming a magnet for competitive scientific knowledge. It has already attracted some outstanding research talent, despite the fact that it is not scheduled to be fully operational for another year. At that point Prof. Mark Fishman, Head of Pharmaceuticals Research, will be leading a team of almost one thousand research scientists.

Talent Takes Center Stage

Sixteen high-performing associates were enlisted from across the organization in November 2001 to form a Talent Management Task Force. Their mission was to brainstorm ways to attract, develop, assess, deploy and retain talent. The ideas were presented at a Group Leadership Meeting, the forum where Chairman and CEO Daniel Vasella, MD, invites his senior leaders to review past performance and to discuss future objectives every year.

As a result of this process, three priorities emerged:

- Define our vision, values and leadership standards and assess our talent reservoir
- Make talent development a key objective for each Novartis manager
- Create a program to accelerate the development of high potential talent

Better Training, Sharper Tools

In 2002, as this new talent management strategy was implemented, visible progress was made throughout the organization. An accelerated development program to fast-track high potential talent was piloted, and proved so successful that it is now being rolled out. In addition, under the global talent management strategy the existing organization and talent review process has been further strengthened and extended to cover all managerial levels globally. It provides a common methodology to enable our business leaders to identify the capabilities of their organizations and develop their talent bases. The implementation of this process has been enhanced for managers with the provision of a more comprehensive toolkit and supported with better training. The issue of matching best talent with critical jobs has also been included with the introduction of our Talking Talent meetings. Skills and potential can be identified and calibrated here to ensure that we remain agile in the marketplace by growing our own leaders.

2002 Personnel Costs by Function and Region

CHF millions	Research and development	Production and supply	Marketing and distribution	General and administration	Total
USA	671	506	1 695	378	3 250
Canada and Latin America	21	117	273	83	494
Europe	739	864	1 173	768	3 544
Africa/Asia/Australia	86	65	445	87	683
Total	**1 517**	**1 552**	**3 586**	**1 316**	**7 971**

A priority of the global talent management strategy is establishing common global leadership standards and communicating them throughout the organization. These standards have already strengthened our ability to upgrade the quality of our selection and assessment, and have resulted in improvements to the execution of our learning curricula in line with new strategy challenges.

Learning for Results

The overall objective of the Novartis learning program is learning for results. We believe that identifying and developing talent is one of our most important priorities: better managers inspire and produce superior results. Improving performance through management development and learning is an essential component of our long-term strategy.

Novartis Learning responds to the needs of our businesses with learning programs that focus on key commercial issues and performance improvement. A member of the Novartis senior leadership team sponsors each of our programs.

Learning programs helped managers translate strategy into action by emphasizing leadership as a core competence. Our Leading at the Frontline program enhanced the leadership skills of more than 1 500 managers worldwide, showing them how to achieve better results by improving the performance of their people. This program has enhanced our managers' ability to lead their associates, capitalize on the diverse talents of their teams, and create an environment that fosters innovation, cooperation and open communication.

Our Clinical Development and Medical Affairs function (CD&MA) regularly reviews our current programs to ensure continual up-grading and improvement of the learning environment. eLearning was identified as an essential component in a well-blended approach to training and learning. This has allowed for the tailoring of specific courses to meet individual associates' needs. Virtual classroom technology, self-pacing eLearning modules and recorded professional interviews with experts and academics are utilized independently, as well as in conjunction with traditional courses. Our blended approach has led to a more consistant global delivery of knowledge and to much more timely provision of required training events. The variety and scope of training courses increased as the cost for training-related travel expenses fell.

Our current technology-based programs, such as eLearning SOPs, virtual classroom training for global projects, CD&MA management systems and various application trainings will be extended and improved throughout the year.

Employees by Function and Region (2002 averages)

	Research and development	Production and supply	Marketing and distribution	General and administration	Total
USA	3 214	5 097	9 062	1 558	18 931
Canada and Latin America	298	3 667	4 671	1 131	9 767
Europe	6 320	10 467	11 487	4 306	32 580
Africa/Asia/Australia	821	2 906	7 873	1 144	12 744
Total	**10 653**	**22 137**	**33 093**	**8 139**	**74 022**

Business Finance Skills

The Harvard Business School business finance program is another example of the high-level training approach adopted by Novartis Learning. This course was designed specifically for managers outside the finance function. The program was customized for Novartis through the development of a number of Novartis-specific case studies. We invited Novartis managers to share their expertise, and worked closely with members of the Harvard faculty to tailor their instruction to Novartis. This program has achieved its goal of ensuring that managers understand the financial impact of their decisions and the role they play in creating long-term, sustainable growth in value for Novartis.

Project Leadership Ability

The Novartis Learning activities in 2002 also helped to build up project leadership skills. A strong project leadership ability is critical in keeping Novartis at the forefront of the fast-paced, highly competitive healthcare industry. The project management curriculum offered more than 600 Novartis managers the unique opportunity to enhance their capability in managing very demanding and complex projects, especially within Research and Development.

Gender Diversity and Work-Life Balance

Women now account for 45% of our total employees. In many of our affiliates, including Novartis Pharma in Canada, Germany and Poland, more than 50% of our associates are women. In the US company, now more than 35% of the management are female. Many of them have to achieve the difficult balance between work and family. This balancing act is also increasingly becoming an issue for many of our male associates. Our programs, working infrastructure, internal policies and guidelines make us one of the recognized industry leaders in this field.

In the US, for the fourth straight year, Working Mother Magazine has named our US Pharmaceuticals affiliate, Novartis Pharmaceuticals Corporation, among the Best 100 Companies for Working Mothers. The judges at Working Mother were especially impressed with our support for flexible work styles throughout Novartis. This recognition has come to be seen as the gold standard for assessing work-life practices in corporate America.

In many communities we are known as an advanced, flexible and exemplary employer with regard to work/family issues. This doesn't mean that we can't improve. We regularly survey our associates, and despite an overall satisfactory picture, work-life balance does still appear to be a problem affecting about 25% of senior managers.

Female Employees by Business

	Female employees %	Female management %
Pharmaceuticals	45	28
Generics	42	17
OTC	51	33
Animal Health	42	29
Medical Nutrition	41	28
Infant & Baby	44	30
CIBA Vision	47	32
Corporate	57	19
Group overall	**45**	**27**

Female Employees by Region

	Female employees %	Female management %
USA	49	36
Canada and Latin America	47	33
Europe	45	27
Africa/Asia/Australia	36	17
Group overall	**45**	**27**

Novartis accepts this challenge and is now piloting an approach that can be used on a case-by-case basis to assess its broader suitability.

Excellence in Research

One of the key developments in drawing top scientific talent to Novartis has been the new Novartis Institutes for Biomedical Research Inc. (NIBRI) in Cambridge, Massachusetts. Designed to be the Novartis "US brain trust, it is fast becoming a magnet, inexorably drawing in world-class talent. By 2004, NIBRI will be fully staffed with nearly one thousand top research scientists.

Prof. Mark Fishman, the new Head of Pharmaceuticals Research is himself a focal point, and obviously such a major enterprise is creating something of a stir among the scientific community. Despite the fact that there is strong competition in the marketplace, his vision together with the resources of Novartis and our results-oriented culture, are together attracting ambitious research scientists with the ability to succeed. A clear measure of the importance of this project can be seen in the fact that over 60% of the Novartis scientific researchers based in New Jersey have requested to make the move to Cambridge.

On December 11, 2002, Prof. Fishman conferred the fifth annual Novartis Distinguished Scientist (NDS) and Novartis Leading Scientist (NLS) Awards in Basel. NDS Awards were won this year by Dr. André Cordier for his work in the field of genomics and toxicogenomics, and by Dr. John R. Fozard, for his work with antiasthmatic agents. The work of the two researchers is highly regarded by the scientific community, both within Novartis and externally. In addition to the right to call themselves Novartis Distinguished Scientists, this year's two winners of the coveted NDS Award will each receive CHF 40 000. The twelve winners of the NLS award will each receive CHF 25 000.

Global Recruitment

As part of our global talent management strategy, an employer value proposition has been developed. This is being introduced as a part of our new global recruitment strategy, and will define the benefits of becoming an associate at Novartis.

We extend a welcome to our new associates from Slovenia based Lek d.d., the largest Generics business in Eastern Europe, which we have recently acquired. We look forward to developing existing opportunities in this new market, as well as seeking out new ones. We also take this opportunity to wish every success to former associates with our Food and Beverage business, which has been sold to Associated British Foods plc.

Human Resources Key Indicators of Lek

	Lek	Novartis
Employees	3 687	72 877
In home country	65%	14%
Gender distribution (female)	54%	45%
Working in R & D	12%	14%
Working in production	46%	30%
Working in marketing	26%	45%
Personnel cost in % of sales	21	25
Sales per employee (CHF millions)	0.17	0.44

Corporate Citizenship data of Lek are not included in the reported Novartis data.

Looking to the Future

This year, we will continue building on the quality execution of our talent management strategy in all functions and businesses. Our focus over the next few years will be on building and improving succession candidates for key jobs and continuing to implement world-class learning and development programs to allow all of our associates to maintain and upgrade their skills and knowledge.

To accomplish all this, we have implemented Pathways for Talent Management. This framework not only helps associates to better understand the various initiatives available, but also makes clear the links between the various programs.

Naturally, we continue to make rigorous assessment of the people we select for leadership roles. The global methodology of the organization and talent review process, the internet-based support tools and the added dimension of the Talking Talent meetings will ensure that we can recognize and grow our own talent from within, into a measurable, visible and sustainable competitive advantage.

In April 2003, Novartis will again be organizing a Community Partnership Day, as in previous years, this time under its new umbrella theme, “Caring Across Generations.” To commemorate the merger of our predecessor companies, this day is dedicated to making our presence felt in the communities in which our associates live and work.

Assurance Report on the Novartis Group Corporate Citizenship Reporting

PRICEWATERHOUSECOOPERS

To the Audit and Compliance Committee of Novartis AG:

We have performed review procedures on the management and reporting processes for Corporate Citizenship (CC); Health, Safety and Environment (HSE); and Human Resources (HR) for the year ended December 31, 2002. We have also performed review procedures on the HSE key figures "Health, Safety and Environment Data 2002" on pages 56 and 57 and on the HR key figures "Employees by Region and Business" found on page 60; and "Female Employees by Business" and "Female Employees by Region" which are found on page 63 of the Novartis Annual Report (the Report) for the year ended December 31, 2002. Novartis management is responsible for the Report and for the development and maintenance of the internal reporting processes, data and key figures for CC, HSE and HR. Our responsibility is to report on the internal reporting processes, data, and key figures for CC, HSE and HR based on our review procedures.

The scope of our review procedures was to:

- Observe the existence of internal management processes and controls which ensure the implementation of the CC Policy including the Code of Conduct (CoC) across the Novartis Group (the Group);
- Test the effectiveness of the internal reporting system used at Group level to collect CC, HSE and HR information;
- Observe compliance with the Group internal HSE reporting guidelines at the site level; and
- Perform, on a sample basis, certain procedures on the 2002 HSE and HR key figures.

Our review procedures included:

- Interviewing personnel responsible for CC management at Group level;
- Visiting the country headquarters in China, Costa Rica, Germany, India, Switzerland, the United Kingdom and the United States, and specific sites in China, Costa Rica, Germany, India, Ireland and the United States;
- Interviewing the Country Executive, Country CC Executive, CoC Compliance Officer, Human Resources leader and others responsible in selected countries for the CC rollout, reporting and 2003 target setting and HR key figures;
- Reading and performing tests on a sample basis of the relevant documentation including Group policies, management and reporting structures, documentation and systems in place to collect, analyze and aggregate reported CC, HSE and HR key figures; and
- Performing tests on a sample basis of evidence supporting selected HSE parameters with regard to the reported data aggregation from eight selected production sites to Group level.

There are no generally accepted international standards for the preparation or assurance of corporate sustainability or corporate citizenship reports. In the absence of such standards, we based our approach on best practices including emerging, but not yet established, standards such as the Global Reporting Initiative (GRI) and the European Federation of Accountants' (FEE) Discussion Paper "Providing Assurance on Sustainability Reports," as well as on the underlying principles within standards promulgated by the Swiss profession and International Standards on Auditing. We therefore planned and performed our procedures to obtain a reasonable basis for our conclusions. However, we have not performed an audit. Accordingly, we do not express such an opinion.

Our statement should be read in conjunction with the sections "Implementation" on page 41 and "HSE Performance and Data Management" on page 54 of the Report which define the scope of the reporting, the inherent limitations of accuracy and completeness for the CC information, and the fact that the CC management process is in its first year of operation.

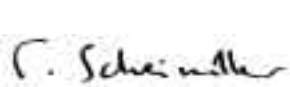
Based on our review procedures, nothing has come to our attention to cause us to believe that:

- The Group level processes and controls intended to implement the CC Policy are not functioning as designed;
- The Group level reporting system for the collection, analysis and aggregation of the reported CC, HSE and HR key figures are not functioning as designed; and
- The reported 2002 CC, HSE and HR key figures do not properly reflect the figures as reported by the sites or reporting units.

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

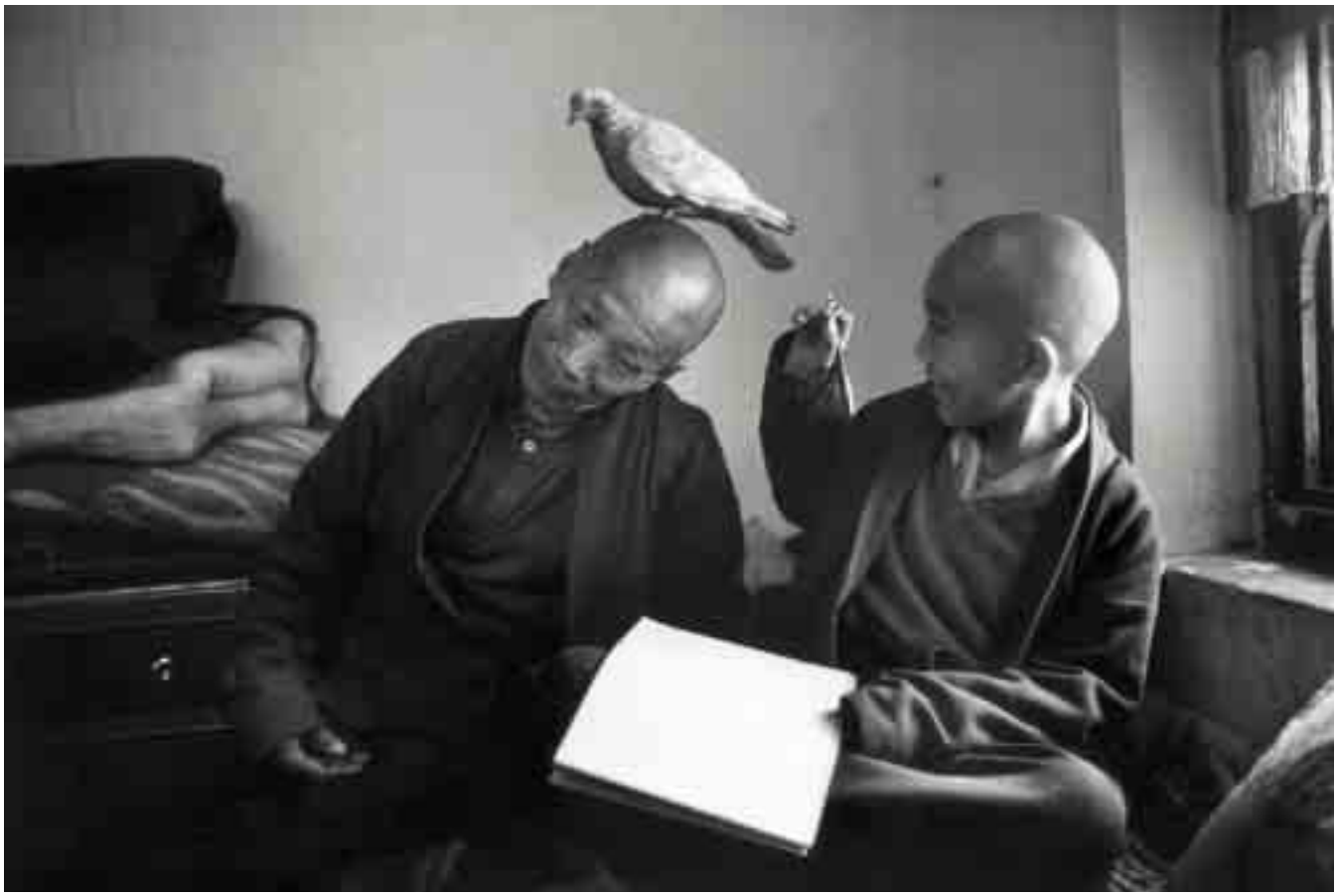
- Novartis should establish a formal Group level quality review process for CC reporting;
- Novartis should evaluate the achievement of improvements in certain HSE key performance indicators and targets over a 3 to 5 year period. With the current HSE data quality and reporting scope, a number of Novartis' annual HSE key performance indicator variances lie in the range of their potential inaccuracies. One example is Novartis' corporate target for CO_2 emissions reductions; and
- Novartis should foster further learning within its Divisions and Business Units regarding effective procedures for the last quarter estimation of HSE key figures. This estimation is part of the new process, introduced in 2002, for quarterly and monthly reporting of the HSE key performance indicators.

PricewaterhouseCoopers AG



Dr. Thomas Scheiwiller Thomas Frei

Basel, January 21, 2003



...balance and counterbalance... Tulku Khentro Lodro Rabsel and Lhagyel, Shechen Monestary, Bodnath, Nepal

Corporate Governance at Novartis

Novartis is fully committed to good corporate governance. Our principles and rules on corporate governance are laid down in the Articles of Incorporation, the Regulations of the Board and the Charters of the Board Committees.[1] The Board's Corporate Governance Committee reviews these principles and rules regularly in the light of prevailing best practices and forwards suggestions for improvement to the full Board for approval.

In 2002, Novartis shareholders' rights were reinforced by three changes to the Articles of Incorporation: reduction of the deadline for submitting agenda items prior to a General Meeting from 60 to 45 days introduction of the option of conducting electronic voting during the General Meeting; and reduction in the Directors' terms of office from four to three years.

This report conforms with the new Directive on Information Relating to Corporate Governance published by the SWX Swiss Exchange on July 1, 2002.[2]

Group Structure and Shareholders

Novartis AG, a holding company organized under Swiss law, owns directly or indirectly all Novartis companies worldwide.

The Novartis Group is divided operationally into two divisions: Pharmaceuticals and Consumer Health. The Pharmaceuticals Division is organized into five business units: Primary Care, Oncology, Transplantation, Mature Products and Ophthalmics. The six business units of the Consumer Health Division are: Generics, Over-the-Counter self medication (OTC), Animal Health, Medical Nutrition, Infant & Baby and CIBA Vision. Due to the fact that the Pharmaceuticals business units have common long-term economic perspectives, customers, research, development, production, distribution and regulatory environment, their financial data are not required to be separately disclosed. The business operations of the business units are conducted through local Novartis Group companies. The most important Novartis subsidiaries and associated companies are listed in Note 30 to the Group's consolidated financial statements.

The largest registered Novartis shareholders are the Novartis Foundation for Employee Participation (holding 3.3% of the share capital) and Emasan AG (3.1%). No other shareholder is registered as owner of more than 2% of the issued share capital and there are no cross-holdings equal to or higher than this amount.

Capital Structure

The share capital of Novartis AG is CHF 1 412 075 000, fully paid-in and divided into 2 824 150 000 registered shares of CHF 0.50 nominal value each. Novartis AG has neither authorized nor conditional capital.

In 2001, the Novartis shares were split at a ratio of 1:40. In 2002, as a result of a successfully completed share repurchase program, the share capital was reduced from CHF 1 442 602 340 to CHF 1 412 075 000 pursuant to a resolution passed at the Annual General Meeting on March 21, 2002. No other changes in share capital have occurred since January 1, 2000. On July 22, 2002, Novartis announced a new share repurchase program up to a total amount of CHF 4 billion via a second trading line. The Board will propose reducing Novartis AG's share capital by amounts corresponding to the nominal value of repurchased shares at the forthcoming Annual General Meetings.

Convertible Bonds and Options

Affiliates of Novartis AG had two convertible bond issues that were converted into shares in 2002 and are more particularly described in Note 18 to the Group's consolidated financial statements. In December 2001, Novartis sold a total of 55 million nine- and ten-year call options (Low Exercise Price Options, "LEPOs") and 55 million nine- and ten-year put options on Novartis shares to a third party. For further details concerning these options, please see Note 24 to the Group's consolidated financial statements. Information about Novartis share options granted for executive and employee compensation is contained in the section on Compensation further below and in Note 26 to the Group's consolidated financial statements.

Shareholders' Rights

Each registered share entitles the holder to one vote at the General Meeting. There are no preferential voting shares. Shareholders also have the right to receive dividends, appoint a proxy, convene a General Meeting, place items on the agenda of a General Meeting and hold such other rights as defined in the Swiss Code of Obligations (SCO).

[1] These documents are available upon request to the Corporate Secretary, Ingrid Duplain, JD. They can also be accessed at http://www.novartis.com/investors/en/governance.shtml

[2] Where an item listed in the SWX Directive is not addressed in this report, the item is either inapplicable to, or immaterial for, Novartis.

Legitimization as Shareholder

Persons enrolled in the Novartis share register may exercise the membership rights of registered shares. Registration requires a declaration that the shareholder has acquired the shares in his own name and for his own account.

According to the Articles of Incorporation, no shareholder shall be registered to vote more than 2% of the issued share capital unless the Board has upon request granted an exemption. So far, such a request has never been denied. The Board may register nominees with the right to vote up to 0.5% of the issued share capital, and in excess of that limit if such nominees disclose particulars of the beneficial owners of these shares.

Groupings formed to circumvent this limitation are treated as one single person or nominee.

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

Resolutions and Elections at General Meetings

Shareholders registered at least 20 days prior to the General Meeting may vote their shares at the meeting.

At last year's General Meeting the newly introduced option of electronic voting was adopted for all resolutions undertaken.

Resolutions of the shareholders at General Meetings are approved with a simple majority of the shares represented at the meeting, except in the following matters which by law (SCO, Art. 704) and our Articles of Incorporation require the approval of two-thirds of all represented shares:

- Alteration of the purpose of Novartis AG;
- Creation of shares with increased voting powers;
- Implementation or removal of restrictions regarding the transferability of shares;
- Authorized or conditional increase of the share capital;
- Increase of the share capital from equity or a contribution in kind, for the purpose of an acquisition of property and the grant of special rights;
- Restriction or suspension of rights of option to subscribe;
- Change in location of the registered office of Novartis AG;
- Dissolution of Novartis AG without liquidation.

The Board of Directors

Members of the Board of Directors[1]

	Age	Director since	Term Expires
Daniel Vasella, MD	49	1996	2004
Prof. Helmut Sihler, JD, PhD	72	1996	2004
Hans-Jörg Rudloff	62	1996	2004
Dr. h.c. Birgit Breuel	65	1996	2005
Prof. Peter Burckhardt, MD	64	1996	2005
Walter G. Frehner	69	1996	2004
William W. George	60	1999	2003
Alexandre F. Jetzer	61	1996	2005
Pierre Landolt	55	1996	2005
Prof. Ulrich Lehner, PhD	56	2002	2005
Heini Lippuner	69	1996	2004
Prof. Rolf M. Zinkernagel, MD	58	1999	2003

The average tenure of our Directors is five years and their average age is 62 years. Daniel Vasella, MD, is the only executive Director. Alexandre F. Jetzer was a member of the Executive Committee until 1999 and supports Novartis' Government Relations under a consultancy agreement. With the exception of Daniel Vasella, MD, and Alexandre Jetzer, all Directors are independent and have no material dealings with Novartis AG or other companies of the Novartis Group outside their role as a Director[2]. No Director sits on the board of directors of other listed companies with which any Novartis Group company conducts a material amount of business.

The specific term of office for a Director is determined by the General Meeting on the occasion of his or her election. Each year approximately one third of all Directors are elected or re-elected.

In principle, a director is to retire after 12 years of service or the reaching of 70 years of age. Nonetheless, the shareholders may re-elect such Directors for additional terms of office.

Daniel Vasella, MD, has been elected by the Board as its Chairman and also to serve as Chief Executive Officer. It is the view of the Board that this dual role ensures effective leadership and excellent communication between the shareholders, the Board and Management.

The Board has appointed Prof. Helmut Sihler, JD, PhD, as Lead Director, whose responsibility it is to ensure

[1] See also the biographical information on pages 79-81; Hans-Ulrich Doerig, PhD, stepped down from the Board at the 2002 Annual General Meeting.

[2] In his capacity as a Director, Prof. Zinkernagel, MD, represents the Board of Directors' interests on the Scientific Advisory Boards of the Genomics Institute of the Novartis Research Foundation (GNF) and the Novartis Institute for Tropical Diseases (NITD).

an orderly process in evaluating the performance of the Chairman and CEO and to chair the Board's private sessions (i.e. the meetings of the non-executive Directors). In case of a crisis, he would assume leadership of the independent Directors.

The Board appointed Prof. Helmut Sihler, JD, PhD, and Hans-Jörg Rudloff as its Vice Chairmen.

Role and Functioning of the Board

The Board holds the ultimate decision-making authority of Novartis AG for all matters except those reserved by law (SCO, Art. 698) to the shareholders.

Decisions are taken by the Board as a whole, with the support of its four Committees described below (Chairman's Committee, Compensation Committee, Audit and Compliance Committee and Corporate Governance Committee). The primary functions of the Board are:

- Strategic direction of Novartis;
- Organization of Novartis;
- Accounting matters, financial control and financial planning;
- Appointing and dismissing members of the Executive Committee and other key executives;
- Setting compensation policies;
- Overall supervision of the business operations;
- Setting out matters to be presented at the General Meeting, including the Novartis AG financial statements and the Group's consolidated financial statements.

The Board has delegated to the Executive Committee the coordination of day-to-day business operations of Group companies. The Executive Committee is headed by the Chief Executive Officer. The internal organizational structure and the definition of the areas of responsibility of the Board and the Executive Committee are set forth in the Board Regulations.(1)

The agenda for Board meetings is set by the Chairman. A Director may request that an item be included on the agenda. Board Members are provided with adequate materials to prepare for the items on the agenda in advance of Board meetings.

The Board recognizes the importance of being fully informed on material matters involving the Group and ensures that it has sufficient information to make appropriate decisions through several means:

- By invitation, members of senior management attend Board meetings to report on areas of the business within their responsibility;
- Board Committees, in particular the Audit and Compliance Committee, regularly meet with management and outside consultants, including the Group's external auditors, to review the business, better understand all laws and policies impacting the Group and support the management in meeting requirements and expectations;
- Informal teleconferences between Directors and the Chairman and CEO or the Lead Director, as well as regular distribution of important information to the Directors.

During 2002, the Board met seven times. Detailed information on each Director's attendance at full Board and Board Committee meetings is provided in the table below.

Once yearly, the Board reviews the performance of the Chairman and CEO and approves the objectives for the following year. The Board of Directors also performs a self-evaluation once a year.

Board Committees

Detailed information on attendance at full Board and Board Committee meetings is as follows:

	Full Board	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Number of meetings in 2002	7	9	3	4	2
Daniel Vasella, MD	7[1]	9[1]			
Prof. Helmut Sihler, JD, PhD	6	8	3[1]	4[1]	2
Hans-Jörg Rudloff	6	8	3		1
Dr. h.c. Birgit Breuel	7			4	
Prof. Peter Burckhardt, MD	7				
H.-U. Doerig, PhD[2]	1			1	
Walter G. Frehner	7			4	
William W. George	7	9	3		2[1]
Alexandre F. Jetzer	7				
Pierre Landolt	7				
Prof. Ulrich Lehner, PhD[3]	5			3[4]	
Heini Lippuner	7	9			
Prof. Rolf M. Zinkernagel, MD	7				2

[1] Chair [2] Until March 21, 2002 [3] Since March 21, 2002 [4] Since August 20, 2002

(1) This document is available upon request to the Corporate Secretary, Ingrid Duplain, JD. It can also be accessed at http://www.novartis.com/investors/en/governance.shtml

Role and Functioning of the Board Committees
Each Board Committee has a written Charter outlining its duties and responsibilities and a chair elected by the Board. The Board Committees meet regularly and consider meeting agendas determined by the chair. Board Committee members are provided with adequate materials to prepare for the items on the agenda in advance of Board meetings.

The Chairman's Committee
The Chairman's Committee consists of the Chairman and Chief Executive Officer, the two Vice Chairmen, one of whom is the Lead Director, and such other members as are elected by the Board from time to time. In 2002, the Committee met nine times.

The Chairman's Committee comments on all matters falling within the authority of the Board before the latter takes decisions on such matters and, in urgent cases, can take any preliminary and necessary action on behalf of the Board. The Chairman's Committee also interfaces with the Executive Committee, 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 independent Directors. In 2002, it convened three times. The Compensation Committee reviews and approves the 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 seeks outside expert advice from time to time to support its decisions and recommendations.

The Audit and Compliance Committee
The Audit and Compliance Committee is composed of four members and in 2002 met four times. The Board has determined that all the members of the Committee are independent, as defined by the rules of the New York Stock Exchange, and that its chair, Prof. Sihler, JD, PhD, is adequately qualified in financial management matters. The Board has also reassured itself that other members of the Committee have sufficient experience and ability in finance and matters of compliance to enable them to adequately discharge their responsibilities.

The Committee's main duties are:
- Evaluate and select the external auditors to be nominated for election by the Annual General Meeting;
- Review the terms of engagement of the external auditors and the scope of the external audit;
- Discuss with the external auditors the results of their audits, any unusual items or disclosures contained in the audits, and the matters required by US Statement on Auditing Services No. 61 (including, for example, the initial selection of, and changes in, significant accounting policies and the process utilized by management to formulate significant accounting estimates);
- Review the scope of our internal auditing and the adequacy of the organizational structure and qualifications of the internal auditing staff;
- Review with external auditors, internal auditors and the financial and accounting management of Novartis whether the accounting policies and financial controls are appropriate, adequate and effective;
- Meet with management and the external auditors to review the financial statements and annual report;
- Review risk control processes and procedures;
- Review all relationships between Group companies and external auditors;
- Review the processes and procedures for ensuring compliance with laws and internal regulations (such as the Novartis Code of Conduct);
- Oversee Novartis' commitments as a subscriber to the UN's Global Compact initiative.

The Corporate Governance Committee
The Corporate Governance Committee is composed of four independent Directors and met twice in 2002. The Corporate Governance Committee develops corporate governance principles and recommends these to the Board for approval. Its duties include the regular review of the Articles of Incorporation with a view to reinforcing shareholder rights and of the composition and size of the Board and its committees. The Corporate Governance Committee conducts an annual evaluation of the Board as a whole and gives guidance to the Directors on how to avoid potential conflicts of interests.

Compensation

Non-Executive Directors' Compensation

The Compensation Committee advises the Board of Directors on the compensation of non-executive Directors. Non-executive Directors receive an annual retainer in an amount that varies with the Board and Committee responsibilities of the Director. Directors are eligible to participate in certain of the equity programs which we offer to senior management and selected employees. Directors receive no additional fees for attending meetings or acting as committee chairs. Directors can choose to receive the annual retainer in cash, shares or share options or a combination thereof. In addition, subject to the business performance of the Group, the Directors may receive a share grant. In 2002, 3 000 shares were granted to each Director in acknowledgement of 2001 business performance. Directors are reimbursed for travel and other necessary business expenses incurred in the performance of their services.

2002 Directors' Compensation

	Annual Cash Compensation (CHF)	Shares (number)	Share Options (number)
Daniel Vasella, MD Chairman's Committee (Chair)	(please refer to the table on page 75)		
Prof. Helmut Sihler, JD, PhD Vice Chairman, Lead Director Chairman's Committee (Member) Compensation Committee (Chair) Audit and Compliance Committee (Chair) Corporate Governance Committee (Member)	**230 179**	**7 544**	**17 276**
Hans-Jörg Rudloff Vice Chairman Chairman's Committee (Member) Compensation Committee (Member) Corporate Governance Committee (Member)	**24 686**	**3 000**	**24 570**
Dr. h.c. Birgit Breuel Audit and Compliance Committee (Member)	**219 940**	**3 000**	**-**
Prof. Peter Burckhardt, MD	**95 656**	**4 212**	**-**
Hans-Ulrich Doerig, PhD[1] Audit and Compliance Committee (Member)	**11 832**	**3 000**	**-**
Walter G. Frehner Audit and Compliance Committee (Member)	**78 546**	**3 000**	**10 750**
William W. George Chairman's Committee (Member) Compensation Committee (Member) Corporate Governance Committee (Chair)	**87 500**	**3 000**	**23 035**
Alexandre F. Jetzer	**12 312**	**3 000**	**9 214**
Pierre Landolt	**55 550**	**3 000**	**6 911**
Prof. Ulrich Lehner, PhD[2] Audit and Compliance Committee (Member)	**391 371**	**-**	**-**
Heini Lippuner Chairman's Committee (Member)	**18 310**	**3 000**	**18 428**
Prof. Rolf M. Zinkernagel, MD Corporate Governance Committee (Member)	**267 832**[3]	**3 000**	**15 357**
Total	**1 493 714**	**38 75**	**125** 541

[1] Hans-Ulrich Doerig, PhD, who is Vice Chairman of the Executive Board and Group Chief Risk Officer of Credit Suisse Group, stepped down from the Board of Novartis AG at the 2002 Annual General Meeting in line with our commitment to good corporate governance principles and to avoid any question of possible conflicts of interest. (Daniel Vasella, MD, is a member of the Board of Directors of Credit Suisse Group.)

[2] Prof. Ulrich Lehner, PhD, CEO of Henkel AG, was elected as a new Board Member at the 2002 Annual General Meeting.

[3] Includes CHF 250 000 for acting as the Board's delegate in the scientific advisory boards of the Genomics Institute of the Novartis Research Foundation (GNF) and the Novartis Institute for Tropical Diseases (NITD).

Ownership of Novartis Shares and Share Options by the Non-Executive Directors

The total number of Novartis shares owned as of December 31, 2002 by the non-executive Directors and persons closely linked to them was 252 016. "Persons closely linked to them" are (i) their spouse, (ii) their children below age 18, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary. No non-executive Director owned 1% or more of our outstanding shares.

As of December 31, 2002, the individual ownership of Novartis shares by the non-executive Directors (including persons closely linked to them) was as follows:

Beneficial Owner	Number of Shares Owned Directly or Indirectly
Daniel Vasella, MD	(please refer to the table on page 75)
Prof. Helmut Sihler, JD, PhD	34 304
Hans-Jörg Rudloff	86 080
Dr. h.c. Birgit Breuel	4 160
Prof. Peter Burckhardt, MD	16 732
Walter G. Frehner	13 220
William W. George	19 720
Alexandre F. Jetzer	46 120
Pierre Landolt	100
Prof. Ulrich Lehner, PhD	120
Heini Lippuner	26 060
Prof. Rolf M. Zinkernagel, MD	5 400
Total	**252 016**

As of the same date, the non-executive Directors held a total of 331 901 Novartis share options. The number of share options, and exercise price have been adjusted to reflect the share split of 1:40 in 2001. Broken down by grant year the number of options held are:

Grant Year	Options Held (number)	Exercise Price (CHF)	Term Life (years)
2002	125 541	62.0	9
2001	90 480	70.0	9
2000	78 680	51.3	9
1999	17 200	68.4	9
1998	20 000	42.8	9

Compensation for Former Directors and Executives

In 2002, a total amount of CHF 180 000 was paid to three former members of the Board and CHF 2 186 507 to two former members of the Executive.

Report of the Compensation Committee

Executive Compensation Policy

Novartis' compensation programs are designed to attract, retain and motivate the high caliber of executives, managers and associates who are critical to the success of the corporation. Globalization of labor markets for specialists and executives has led to a rapid convergence between US and European principles of compensation and a stronger focus on long-term, equity based forms of programs.

Overall, the intention of the programs is to provide compensation opportunities that:

- Are comparable to those provided by a selected group of industry specific competitors;
- Support a performance oriented culture that allows high performers to achieve superior rewards; and
- Align executive, management and associates to create sustainable shareholder value.

Total individual compensation at target performance level is aimed at the median of comparable companies of our industries. Annual cash and equity incentive awards are based on both overall Group or affiliate company and individual performance. Long-term incentive awards include share options and other forms of equity participation.

Executive compensation programs strongly encourage significant levels of share ownership and put a high portion of total compensation at risk, subject to individual and company performance and the appreciation of Novartis shareholder value.

The Compensation Committee believes that the existing compensation programs have achieved the desired effects.

Compensation Programs Descriptions

The total compensation package for each executive consists of the three basic components discussed in more detail below. Target salary and incentive levels are set at the median of the peer group, based on available public data and the analysis of external compensation advisors. Actual compensation levels of individuals may in some instances surpass the median of the market, reflecting superior results. The Compensation Committee believes that this position is consistent with the performance of the Group and its evaluation of the external market.

Salaries: The 2002 salaries of the Swiss-based Executive Committee members are shown in the "Salary" column of the Summary Table – 2002 Compensation.

Annual Incentive Awards: Under the terms of the Novartis Annual Incentive Plan, awards are made each year based on the achievement of predetermined Group and individual performance objectives. Below a threshold level of performance, no awards may be granted under the plan.

Long-Term Incentive Compensation: Long-term incentive compensation, in the form of share options, performance-contingent shares, and restricted shares, comprises a major portion of the total compensation package for executives. In any given year, an executive may be offered share options, performance-contingent shares, and/or restricted shares. Long-term incentives are targeted at the median of the competitive market, with above-average and superior performance resulting in long-term compensation above the targeted amounts. Below a threshold level of performance, no awards may be granted under the plan. Share options are also granted to selected employees.

Share Options

(a) Novartis Share Option Plan

Under the Novartis Share Option Plan, directors, executives and other selected employees of Group companies (collectively, the ''Participants'') may be granted options to purchase Novartis shares. These options are granted both in recognition of past performance and as an incentive for future contributions by the Participants. They allow the Participants to benefit as the price of the shares increases over time, and so provide a long-term incentive for improvements in our profitability and success. If a Participant voluntarily leaves Novartis, options not yet vested will generally be forfeited. The options under the Novartis Share Option Plan have an exercise period of seven years, which begins after the lapse of a two-year vesting period.

(b) Novartis US ADS Incentive Plan for US-based employees

Introduced in 2001, the Novartis US ADS Incentive Plan grants options to US-based Directors, officers and other selected employees thus replacing a Share Appreciation Rights Plan. Its terms and conditions are substantially equivalent to the Novartis Share Options Plan.

Share Plans: We offer to certain Directors and executives a Long-Term Performance Plan, a Leveraged Share Savings Plan and a Restricted Share Plan. These plans are designed to foster long-term commitment of eligible employees by aligning their incentives to our performance.

(a) Long-Term Performance Plan

Under the Long-Term Performance Plan, participants are awarded the right to earn Novartis shares. Actual payouts, if any, are determined with the help of a formula, which measures, among other things, our performance using economic value added relative to predetermined strategic plan targets over a three-year period. Additional functional objectives may be considered in the evaluation of performance. If performance is below the threshold level of the pre-determined targets, then no shares will be earned. To the extent the Group's performance exceeds the threshold performance level, an increasing amount of Novartis shares, up to the maximum cap, will be earned.

(b) Leveraged Share Savings Plan

There are two separate Leveraged Share Savings Plans:

Participants can choose to receive part or all of their Annual Incentive Award in shares. Shares awarded under this plan are blocked for five years after the grant date. After expiration of the blocking period, the respective shares are matched with an equal number of shares.

In 2001 the Board approved a new employee share ownership plan under which Swiss-based employees receive part of their income up to a specified amount in Novartis shares. After the expiration of a blocking period of three years the award is matched with half a share for each share held.

(c) Restricted Share Plan

Under the Restricted Share Plan, employees may be granted restricted share awards either as a result of a general grant or as a result of an award based on having met certain performance criteria. Shares granted under this Plan generally have a five-year vesting period. Restricted Shares carry a high risk of ownership for Swiss-based employees as the tax liability in Switzerland is based on the initial price of the share instead of a later, potentially lower, price at vesting date.

Employee Benefits: Employee benefits offered to executives are designed to be competitive and to provide a safety-net against the financial catastrophes that can result from disability or death, and to provide a reasonable level of retirement income based on years of service with Novartis.

Evaluation of the Executive Committee Members' Performance

The Compensation Committee meets without the Chairman and CEO to evaluate his performance, and with the Chairman and CEO to evaluate the performance of other Executive Committee members. The bonuses and long-term incentives for 2001 and the base salaries for 2002 were discussed and approved at the meetings of the Compensation Committee held in January and February 2002.

The decisions on compensation of Executive Committee members were mainly based on individual performance evaluations taking into account current market conditions. In 2002, the Compensation Committee considered management's achievement of short and long-term goals, including revenue growth, economic value creation (operating and net income, earnings per share and economic value added) and ongoing efforts to optimize organizational effectiveness and productivity. The Compensation Committee also takes into consideration management's responses to the changes in the global marketplace and the strategic position of the Group. The performance measures were weighted subjectively by each member of the Compensation Committee.

The Compensation Committee of the Board of Directors:

Prof. Helmut Sihler, JD, PhD (Chairman)
Hans-Jörg Rudloff
William W. George

Executive Compensation

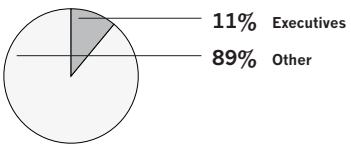
In 2002, there were 20 Executive Committee members and Business Unit Heads ("Executives"), including those who retired or terminated their employment in 2002. In total, the Executives received CHF 13 293 000 in base salaries and CHF 5 063 000 in cash bonuses. The number of share options granted was 2 255 723 and the number of shares granted 317 736. An additional CHF 2 896 000 was set aside for their pension, retirement and similar benefits. Compensation represents all payments made in 2002; however, cash bonuses and long-term compensation are based on 2001 business performance. The following summary compensation table provides details on the 2002 compensation of the Swiss-based Executive Committee members.

Summary Table – 2002 Compensation

Name and Principal Position	Annual Compensation		Long-Term Compensation				
	Salary (CHF)	Cash Bonus (CHF)	Restricted Share Awards (number)[1]	Unrestricted Share Awards (number)[2]	Share Options (number)[3]	All Other Compensation (CHF)[4]	Total Compensation (CHF)[5]
Daniel Vasella, MD							
Chairman & CEO	2 916 667		121 164	71 753	921 376	156 000	20 158 777
Urs Bärlocher, JD							
Head Legal & General Affairs	660 000		13 328	6 625	101 352	156 000	2 437 088
Raymund Breu, PhD							
Chief Financial Officer	900 000		18 175	8 973	276 413	156 000	4 534 588
Paul Choffat, JD							
Head Consumer Health	750 000					156 000	906 000
Thomas Ebeling							
Head Pharmaceuticals	1 000 000	1 100 000	6 452	10 313	270 271	556 000	6 077 087
Norman C. Walker							
Head Corporate HR	600 000		8 240	5 858	43 858	153 759	1 804 234

[1] The Restricted Share Awards include the shares granted under the Leveraged Share Savings Plan.
[2] The Unrestricted Share Awards include the shares granted under the Long-Term Performance Plan.
[3] The share options granted provide the right to purchase one share per option. The closing price at grant date was CHF 61.90 per share, the exercise price CHF 62.00 per share. The options have a cliff-vesting period of two years after the date of grant and will expire on March 7, 2011. These tradable share options have a tax value of CHF 9.19 per option, calculated based on the Black-Scholes Method.
[4] Amounts include among others, payments made to the Management Pension Fund, a defined contribution plan.
[5] The total compensation amounts have been calculated using the taxable value of the shares and share options granted.

Distribution of share options granted to employees



Under the Novartis Share Option Plan and the Novartis US ADS Incentive Plan described above, a total number of 20 967 700 share options were granted to 6 741 participants. Eleven percent of the overall number of share options were granted to Executives.

Ownership of Novartis Shares and Share Options by the Executives

The total number of Novartis shares owned as of December 31, 2002 by the Executives and persons closely linked to them was 836 106. "Persons closely linked to them" are (i) their spouse, (ii) their children below the age of 18, (iii) any legal entities that they own or otherwise control, and (iv) any legal or natural person who is acting as their fiduciary. No Executive owned 1% or more of our outstanding shares.

As of December 31, 2002, the Executives held a total of 3 646 543 Novartis share options. The number of share options and exercise price were adjusted to reflect the share split of 1:40 in 2001. Broken down by grant year, the number of share options held are:

Grant Year	Options Held (number)[1]	Exercise Price (CHF)	Term Life (years)
2002	2 255 723	62.0	9
2001	703 340	70.0	9
2000	461 040	51.3	9
1999	115 400	68.4	9
1998	111 040	42.8	9

[1] The number of share options held includes share options granted under the Novartis Share Option Plan and the US ADS Incentive Plan.

As of December 31, 2002, the individual ownership of Novartis shares of the Swiss-based Executive Committee members (including persons closely linked to them) was as follows:

Beneficial Owner	Number of shares owned directly or indirectly
Daniel Vasella, MD	316 997
Urs Bärlocher, JD	135 373
Raymund Breu, PhD	174 048
Paul Choffat, JD	750
Thomas Ebeling	44 522
Norman Walker	30 178
Total	**701 868**

Swiss Employee Benefit Plans

(a) Swiss Pension Fund

The Swiss Pension Fund is a defined benefit fund that provides retirement benefits and risk insurance (covering death or disability). The Swiss Pension Fund is funded by contributions from Group companies and the insured employees. The Swiss Pension Fund insures remuneration up to a maximum of CHF 220 000 per year. The maximum retirement pension is 60% of the insured remuneration after 40 years of contribution. The table below shows the annual pension benefit by Base Salary and Years of Service. In 2002 Novartis contributed CHF 9 316 for each of the Swiss-based Executive Committee members.

	Years of Service					
Base Salary (CHF)	15	20	25	30	35	40
100 000	16 938	22 584	28 230	33 876	39 522	45 168
140 000	25 938	34 584	43 230	51 876	60 522	69 168
180 000	34 938	46 584	58 230	69 876	81 522	93 168
220 000	43 938	58 584	73 230	87 876	102 522	117 168
over 220 000	43 938	58 584	73 230	87 876	102 522	117 168

(b) Swiss Management Pension Fund

The Swiss Management Pension Fund is a defined contribution plan and provides retirement benefits and risk insurance (covering death or disability) for components of remuneration not covered by the Swiss Pension Fund. Employees exceeding the maximum insurable remuneration of the Swiss Pension Fund are eligible for the Swiss Management Pension Fund. The benefits under the Swiss Management Pension Fund are granted in addition to those of the Swiss Pension Fund. The Swiss Management Pension Fund is funded through contributions by Novartis and the employee.

Personal Loans, Consulting, Change of Control and Severance Agreements

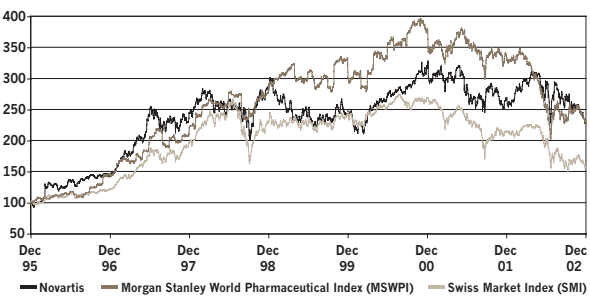
Under the provisions of the US Sarbanes-Oxley Act, enacted in July 2002, no new loans may be given to Executives. Prior to the Act, loans were granted to two Executives totaling CHF 2 060 000. The loans are interest bearing at market rates and are repayable by October 2005.

Under a change of control provision, four executives have provisions whereby their normal contractual severance of 36 months is extended by 24 months during the 12 months following a change of control.

Between January 1, 2002 and December 31, 2002, three Executives left the company. Under the terms of the agreements with these Executives, CHF 1 287 500 have been paid as severance.

Performance Graph

This graph compares our total shareholder returns, the Morgan Stanley World Pharmaceuticals Index (MSWPI), and the Swiss Market Index (SMI). The graph assumes CHF 100 invested at Novartis per share closing price on December 31, 1995, in Novartis shares and each of the indices.



	Dec 95	Dec 96	Dec 97	Dec 98	Dec 99	Dec 00	Dec 01	Dec 02
Novartis	100	147	244	281	247	317	269	230
MSWPI	100	142	221	292	302	380	334	229
SMI	100	122	197	228	245	268	215	158

Report of the Audit and Compliance Committee

The Audit and Compliance Committee has reviewed the Group's financial reporting process on behalf of the Board of Directors. Management is responsible for creating the financial statements and managing the reporting process, including the system of internal controls by which those statements are created.

The internal audit function, which reports to the Chairman and to the Audit and Compliance Committee, reviews the effectiveness, efficiency and appropriateness of the internal control systems, particularly regarding the protection of assets, the completeness and accuracy of operational and financial information (with emphasis on internal reporting) and the adherence to Novartis Group guidelines.

The independent auditors, PricewaterhouseCoopers AG, are responsible for expressing an opinion on the conformity of the audited financial statements with international accounting standards and compliance with Swiss law. 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 all matters of importance. 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, 2002.

Duration of the Mandate and Terms of Office of the Head Auditors

PricewaterhouseCoopers (PwC) assumed the existing auditing mandate for Novartis in 1996. The head auditors responsible for the mandate, Mr. Stephan Bachmann and Mr. James Kaiser, began serving in their roles in 1996 and 2002, respectively.

Audit Fees

The following fees were charged for professional services rendered by PricewaterhouseCoopers for the 12-month period ended December 31:

	2002	2001
	(CHF thousands)	
Audit Services	16 773	19 066
Audit Related Services	1 767	3 487
Tax Services	10 583	13 417
Other Services	2 970	2 926
Continuing Services	**32 093**	**38 896**
Services divested to IBM/Mellon[1]	36 007	36 748
Total	**68 100**	**75 644**

[1] These cover management and human resources consulting services which during 2002 were transfered to IBM and Mellon Financial Services respectively. The amounts shown comprise the fees charged by PwC until the date of the transfer.

Audit Services are defined as the standard audit work that needs to be performed each year in order to issue an opinion on the consolidated financial statements of the Group and to issue reports on the local statutory financial statements. It also includes services that can only be provided by the Group auditor and includes audit of non-recurring transactions and implementation of new or revised accounting policies, internal control review of systems, consents and comfort letters and any other audit services required for US Securities and Exchange Commission filings.

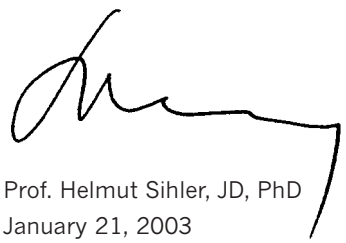
Audit Related Services include those other services provided by auditors but not restricted to those that can only be provided by the auditor signing the audit report. They comprise amounts for services such as acquisition due diligence as well as audit of pension and benefit plans.

Tax Services represent tax compliance and other services and expatriate and executive tax return services.

Other Services consist of actuarial services for pension and employee benefit plans.

Management Consulting Services

At the Annual General Meeting on March 21, 2002, Novartis announced its intention to source management consulting services from providers other than PricewaterhouseCoopers to avoid potential conflicts of interest. To accelerate the achievement of this objective, Novartis issued a temporary stop on the commissioning of PricewaterhouseCoopers for new consulting and outsourcing services. In September 2002, PricewaterhouseCoopers sold its management consulting service group to IBM.



Prof. Helmut Sihler, JD, PhD
January 21, 2003

Board of Directors

From left to right and top to bottom:
Alexandre F. Jetzer, Heini Lippuner, Pierre Landolt, Daniel Vasella, MD, Prof. Rolf M. Zinkernagel, MD, Walter G. Frehner, Prof. Ulrich Lehner, PhD, William W. George, Prof. Helmut Sihler, JD, PhD, Dr. h.c. Birgit Breuel, Dr. h.c. Louis von Planta, JD, Prof. Peter Burckhardt, MD

Daniel Vasella, MD
Chairman and CEO,
Swiss, age 49

Prof. Helmut Sihler, JD, PhD
Vice Chairman and Lead Director,
Austrian, age 72

Hans-Jörg Rudloff
Vice Chairman,
German, age 62

Dr. h.c. Birgit Breuel
German, age 65

Prof. Peter Burckhardt, MD
Swiss, age 64

Walter G. Frehner
Swiss, age 69

William W. George
American, age 60

Alexandre F. Jetzer
Swiss, age 61

Pierre Landolt
Swiss, age 55

Prof. Ulrich Lehner, PhD
German, age 56

Heini Lippuner
Swiss, age 69

Prof. Rolf M. Zinkernagel, MD
Swiss, age 58

Honorary Chairmen

Alex Krauer, PhD
Marc Moret, PhD
Dr. h.c. Louis von Planta, JD

Corporate Secretary

Ingrid Duplain, JD

Board of Directors

Dr. h.c. Daniel Vasella, MD

Swiss, age 49

Daniel Vasella graduated with a MD from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the USA in 1988. From 1993 to 1995, Daniel Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, Daniel Vasella was a member of the Sandoz Group Executive Committee and the Chief Executive Officer of Sandoz Pharma Ltd. After the merger that created Novartis in 1996, Daniel Vasella served as President and Chairman of the Executive Committee. In 1999, he additionally was appointed Chairman of the Board of Directors. Daniel Vasella is also a member of the Board of Directors of Pepsico, Inc., United States, the Board of Directors of Credit Suisse Group, Switzerland, and the Supervisory Board of Siemens AG, Germany. In addition, he is a member of the International Board of Governors of the Peres Center for Peace in Israel and a member of several industry associations and educational institutions, including the International Business Leaders Advisory Council for the Mayor of Shanghai, where he serves as Chairman. In 2002, Daniel Vasella was awarded an honorary doctorate by the University of Basel.

Prof. Helmut Sihler, JD, PhD

Austrian, age 72

Helmut Sihler studied philology and law in Graz, Austria and Burlington, Vermont (USA) and graduated with a PhD in philology and law. In 1957, he joined Henkel KGaA, Germany, initially holding several positions in the marketing department for consumer goods. From 1980 to 1992, Helmut Sihler was Chairman of the Central Board of Management of Henkel KGaA. In the years 1988 and 1989, Helmut Sihler was President of the Association of the German Chemical Industry. In 1983, Helmut Sihler was elected to the Board of Ciba-Geigy AG and became a Director and Vice-Chairman of Novartis after its creation in 1996. Since 1999, Helmut Sihler has acted as Novartis AG's Lead Director. In the same year, 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 Corporate Governance Committee since 2001. Helmut Sihler was ad interim CEO of Deutsche Telekom AG, Germany, from July to November 2002, and he is Chairman of the Supervisory Board of Porsche AG, Germany.

Hans-Jörg Rudloff

German, age 62

Hans-Jörg Rudloff studied economics at the Universities of Bern and Grenoble and graduated in 1965. He joined Credit Suisse in Geneva and moved to New York in 1968 to join the investment banking firm of Kidder Peabody International. He was in charge of the Swiss operation and was elected Chairman and a member of the Board of Kidder Peabody International in 1978. In 1980 he joined Credit Suisse First Boston and was elected Vice-Chairman in 1983 and Chairman and CEO in 1989. From 1986 to 1990 Hans-Jörg Rudloff was also a member of the Executive Board of Credit Suisse in Zurich in charge of all securities and capital market departments. In 1990 he became a member of the Executive Board of CS First Boston and a member of the CS Holding Board. From 1994 to 1998 Hans-Jörg Rudloff was Chairman of MC-BBL in Luxembourg and joined Barclays Capital in 1998 where he is presently Chairman of the Executive Committee. In 1994, Hans-Jörg Rudloff was elected to the Board of Directors of Sandoz AG and served as its Vice-Chairman from 1995 to 1996, a position that he has also held for Novartis AG since its formation in 1996. In 1999, he became a member of the Chairman's Committee and the Compensation Committee and since 2001 he has been a member of the Corporate Governance Committee. Hans-Jörg Rudloff also serves on a number of boards of other companies, including the Boards of Directors of the TBG Group (Thyssen-Bornemisza Group), Monaco, Marcuard S.A., Geneva, and RBC, Russia, the Advisory Board of Landeskreditbank Baden-Württemberg, Germany, and the Beirat of EnBW (Energie Baden-Württemberg), Germany. He is also on the Advisory Board of the MBA program of the University of Bern, Switzerland.

Dr. h.c. Birgit Breuel

German, age 65

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 the Land Niedersachsen (Lower Saxony), the second largest state of Germany. In 1990, Birgit Breuel was elected to the Executive Board of the Treuhandanstalt, which was responsible for the privatization of the former East Germany's economy; in 1991, she also became the President of the Treuhandanstalt. From 1995 to 2000, she acted as the General Commissioner and CEO of the world exhibition EXPO 2000 in Hannover, Germany. In 1994, Birgit Breuel was elected to the Board of Directors of Ciba-Geigy AG and has served as a Director of Novartis AG since its formation in 1996. In 1999, she became a member of the Audit and Compliance Committee. Birgit Breuel is also a member of the Supervisory Board of Gruner+Jahr AG, Hamburg, Germany.

Prof. Peter Burckhardt, MD

Swiss, age 64

After studying in Basel and Hamburg, Peter Burckhardt graduated with a MD from the University of Basel in 1965. He trained from 1966 to 1978 in internal medicine and endocrinology, mainly at the University Hospital of Lausanne, Switzerland, and the Massachusetts General Hospital, Boston USA, and was nominated Chief of Clinical Endocrinology in 1978, and full Professor of Internal Medicine and Chairman of the Department of Internal Medicine at the University Hospital of Lausanne in 1982. Since 1992, he has been the Head of the Medical Service at the same University. Since 1982 Peter Burckhardt has been the Chairman of the Novartis- (formerly Sandoz-) Foundation for Biomedical Research in Switzerland, and was elected in 1996 to the Board of Directors of the newly formed Novartis AG. Next to his activities as a clinician and academic teacher, Peter Burckhardt is conducting clinical research, mainly in bone diseases and calcium metabolism. He has authored more than 300 scientific publications and is an editorial board member of several international scientific journals. He is the Chairman of National Societies at the International Foundation of Osteoporosis, and is a former president of the Swiss Internist's Society and member of the Appeal Committee of the Swiss Office for Drug Control. Peter Burckhardt is a board member of numerous scientific societies including the Swiss Societies of Nutrition, Clinical Chemistry, Endocrinology, Bone and Mineral Research, the Committee for Endocrinology of the European Community, and since 1990, the organization of the International Symposia on Nutrition and Osteoporosis.

Walter G. Frehner

Swiss, age 69

After completing commercial school and an apprenticeship at the Bernese Cantonal Bank in Interlaken, Walter Frehner broadened his experience both in Switzerland and abroad. In 1958 he joined Swiss Bank Corporation (now UBS) where he held a number of increasingly senior positions. He was appointed General Manager and member of the Executive Board in 1978, President of the Executive Board (CEO) in 1987 and Chairman of the Board of Directors in 1993 from which position he retired in 1996. Walter Frehner has been a member of the Board of Directors of Ciba-Geigy AG since 1994 and of Novartis AG since the merger in 1996. In 2001, he became a member of the Audit and Compliance Committee. He is also a member of the Board of Directors of Schindler Holding AG, Ebikon, Switzerland, and of Bâloise Holding AG, Basel, Switzerland, where he is also the Vice Chairman.

William W. George

American, age 60

William W. George received his BSIE from Georgia Institute of Technology in 1964 and his MBA from Harvard University in 1966. From 1966 to 1969, he worked in the US Department of Defense as special assistant to the Secretary of the Navy and as assistant to the Comptroller. After having served as President of Litton Microwave Cooking Products, William W. George held a series of executive positions with Honeywell from 1978 to 1989. Thereafter he served as President and Chief Operating Officer of Medtronic, Inc. in Minneapolis, and, from 1991 to 2001, as its Chief Executive Officer. From 1996 to 2002, he was Medtronic's Chairman. In 1999, William W. George was elected as a member of the Board of Directors of Novartis AG. In 2001, he became a member of the Chairman's Committee and the Chairman of the Corporate Governance Committee. William W. George is a member of the Boards of Directors of Goldman Sachs and Target Corporation (formerly Dayton Hudson). He is also a Visiting Professor of Management at Ecole Polytechnique Fédérale Lausanne and at the International Institute of Management Development. In addition, he is a member of the Board of Directors of Harvard Business School, American Red Cross, Carnegie Endowment for International Peace and Minneapolis Institute of Arts.

Alexandre F. Jetzer

Swiss, age 61

Alexandre Jetzer studied law and economics at the University of Neuchatel, Switzerland and is a licensed attorney. After more than ten years as General Secretary of the Swiss Federation of Commerce and Industry (Vorort), Alexandre Jetzer joined Sandoz in 1980. In 1981 he became Member of its Group Executive Committee in capacity of Chief Financial Officer (CFO) and, as of 1990, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Vice Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation in East Hanover, New Jersey (USA). From the time of the merger in 1996 until 1999, he was a member of the Novartis Executive Committee and Head of International Coordination, Legal & Taxes. Alexandre Jetzer has served as a Director of Novartis AG since its formation in 1996. He is also a member of the Board of Directors of Clariden Bank, Zurich, Switzerland.

Pierre Landolt

Swiss, age 55

Pierre Landolt graduated with a Bachelor of Law degree from the University of Sorbonne in Paris. From 1974 to 1976, he worked for Sandoz Brazil. In 1977, he acquired an agricultural estate in Brazil, cultivating organic tropical fruit as well as producing dairy products. In 1989, he founded a firm for irrigation systems. In the same year, he became the main associate and director of a bank in São Paulo. Since 1997 Pierre Landolt has been Associate and Chairman of Axial Par Ltda, São Paulo, a company investing in sustainability. In 2000, he was co-founder of Eco Carbone LLC, Delaware, USA, a company focused on the development of carbon sequestration processes in Europe, Africa and South America. In 1986, Pierre Landolt was elected as a member of the Board of Directors of Sandoz AG and he has served as a Director of Novartis AG since its formation in 1996. Pierre Landolt is the President of the Sandoz family foundation, Glaris, Switzerland, and the Chairman of the Board of Directors of Emasan AG, Basel, Switzerland. He is also a member of the Board of Directors of Syngenta AG, and of the Syngenta Foundation for Sustainable Agriculture, both in Basel, Switzerland. In addition, he serves as chairman of the Board of Directors of Curacao International Trust Company, Curacao, Netherlands Antilles, and as vice-chairman of the Boards of Directors of Sandoz FF Holding Bancaire et Financière S.A., Pully, Switzerland, Parmigiani, Mesure et Art du Temps S.A., Fleurier, Switzerland, and the Fondation du Montreux Jazz Festival, Montreux, Switzerland.

Prof. Ulrich Lehner, PhD

German, age 56

Ulrich Lehner studied business administration and mechanical engineering in Darmstadt, Germany. After completing his studies in 1972, he was a teaching and research assistant at the Institute for Business Administration at the Darmstadt Technical University. He earned a Doctorate in Economics in 1975. From 1975 to 1981, Ulrich Lehner was an auditor with Deutsche Treuhand-Gesellschaft AG in Düsseldorf. In 1981, he joined Henkel KGaA as Head of Domestic Affairs in the Central Accounting/Tax Department. After heading the Controlling Department of Fried. Krupp GmbH in Essen, Germany, from 1983 to 1986, he returned to Henkel as Finance Director. From 1991 to 1993, Ulrich Lehner headed the then-formed Management Holding, Henkel Asia-Pacific Ltd., in Hong Kong. From 1994 to 1995, he served Henkel KGaA, Düsseldorf, as Corporate Vice President of the Finance and Controlling Department, and, from 1995 to 2000, as Executive Vice President, Finance/Logistics. He was appointed Deputy President in 1999 and President and CEO of Henkel KGaA in 2000. Ulrich Lehner was elected to the Board of Directors of Novartis AG in 2002. He is also a member of the Audit and Compliance Committee. He also serves as a member of the Board of Directors of Dresdner Bank, Luxembourg, Luxembourg, and of Ecolab Inc., St. Paul, USA. In addition, he is a member of the Advisory Board of Dr. August Oetker KG, Bielefeld, Germany, and of Krombacher Brauerei, Krombach, Germany. He is an Honorary Professor at the University of Münster, Germany.

Heini Lippuner

Swiss, age 69

After completing his commercial studies in St. Gallen, Switzerland, Heini Lippuner began his career with Geigy Ltd in the Dyestuffs Division. Following a number of foreign assignments, he headed the Dyestuffs and Chemicals Division in Germany from 1968 to 1972. He served as a member of the worldwide Dyestuffs and Chemicals Division's management committee of Ciba-Geigy Ltd from 1973 to 1982, and became the Head of this Division in 1982. 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. In 1996, he stepped down from this position and was elected to the Board of Directors of the newly created Novartis AG. Since 1999, he has also been a member of the Chairman's Committee. Heini Lippuner is also member of the Board of Directors of Bühler AG, Uzwil, Switzerland, and of Asset Link AG, Reinach BL, Switzerland. In addition, he is Chairman of the Foundation Board of the International Institute for Management Development (IMD) in Lausanne, Switzerland, and serves on the advisory boards of Credit Suisse Group, Zurich.

Prof. Rolf M. Zinkernagel, MD

Swiss, age 58

Rolf Zinkernagel graduated from the University of Basel with a MD in 1970. Since 1992 he has been Professor and Director of the Institute of Experimental Immunology at the University of Zurich. Rolf 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. In 1999, Rolf Zinkernagel was elected to the Board of Directors of Novartis AG. He has been a member of the Corporate Governance Committee since 2001. He is a member of the Swiss Society of Allergy and Immunology, the American Associations of Immunologists and of Pathologists, the ENI European Network of Immunological Institutions, the International Society for Antiviral Research, and a member of the Executive Board of the International Union of Immunological Societies (IUIS). Rolf Zinkernagel is a member of the Board of Directors of Cytos Biotechnology AG, Schlieren/Zurich, Switzerland. He is also a member of the Scientific Advisory Boards of: The Lombard Odier, Darier Hentsch & Cie Bank, Geneva, Switzerland; BT & T, Jersey; Bio-Alliance AG, Frankfurt, Germany; Aravis General Partner Ltd., Cayman Islands; Cytos Biotechnology AG, Schlieren/Zurich, Switzerland; Bioxell, Milano, Italy; Esbatech, Zurich, Switzerland; Novimmune, Geneva, Switzerland, and MannKind, Sylmar CA, USA Rolf Zinkernagel is also a Science Consultant to: GenPat77, Berlin/Munich, Germany; Aponetics AG, Witterswil, Switzerland; Solis Therapeutics, Palo Alto, USA, and Ganymed, Mainz, Germany.

Executive Committee

From left to right and top to bottom:
Thomas Ebeling, Norman C. Walker, Prof. Mark C. Fishman, MD, Paul Choffat, JD, Raymund Breu, PhD, Daniel Vasella, MD, Urs Baerlocher, JD

Daniel Vasella, MD
Chair since 1996;
Swiss, age 49

Urs Baerlocher, JD
Head of Legal and General Affairs;
Member since 1999;
Swiss, age 60

Raymund Breu, PhD
Chief Financial Officer;
Member since 1996;
Swiss, age 57

Paul Choffat, JD
Head of Consumer Health;
Member since 2002;
Swiss, age 53

Thomas Ebeling
Head of Pharmaceuticals since 2000;
Member since 1998;
German, age 43

Prof. Mark C. Fishman, MD
Head of Pharmaceuticals Research;
Member since 2002;
American, age 52

Norman C. Walker
Head of Corporate Human Resources;
Member since 1999;
British, age 50

Dr. h.c. Daniel Vasella, MD

Swiss, age 49

Daniel Vasella graduated with a MD from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the USA in 1988. From 1993 to 1995, Daniel Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, Daniel Vasella was a member of the Sandoz Group Executive Committee and the Chief Executive Officer of Sandoz Pharma Ltd. After the merger that created Novartis in 1996, Daniel Vasella served as President and Chairman of the Executive Committee. In 1999, he additionally was appointed Chairman of the Board of Directors. Daniel Vasella is also a member of the Board of Directors of Pepsico, Inc., United States, the Board of Directors of Credit Suisse Group, Switzerland, and the Supervisory Board of Siemens AG, Germany. In addition, he is a member of the International Board of Governors of the Peres Center for Peace in Israel and a member of several industry associations and educational institutions, including the International Business Leaders Advisory Council for the Mayor of Shanghai, where he serves as Chairman. In 2002, Daniel Vasella was awarded an honorary doctorate by the University of Basel.

Urs Baerlocher, JD

Swiss, age 60

Urs Baerlocher earned his JD at the University of Basel and was admitted to the bar in 1970. After having worked as a tax lawyer, he joined Sandoz in 1973, and held a number of key positions including Head of Strategic Planning and Head of Group Reporting. In 1987, he was made a member of the Sandoz Executive Board, responsible i.a. for Strategic Planning, HR, Legal, Taxes, Patents and Trademarks. In 1990, he became CEO of the Sandoz Nutrition Division and then, in 1993, CEO of Sandoz Pharma. In 1995, Urs Baerlocher assumed the position of Chairman of the Board of Sandoz Deutschland GmbH (Germany) and Biochemie GmbH (Austria). After the formation of Novartis in 1996 he served as Head of International Coordination, Legal, Tax, Insurance, before his responsibilities were widened to include in addition i.a. Corporate Intellectual Property, Corporate Health, Safety & Environment, Corporate Affairs and Corporate Security.

Raymund Breu, PhD

Swiss, age 57

Raymund Breu graduated from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, with a PhD in mathematics. In 1975, he joined the Treasury Department of the Sandoz Group, and, in 1982, became the Head of Finance for the Sandoz affiliates in the UK. In 1985, he was appointed Chief Financial Officer of Sandoz Corporation in New York, where he was responsible for all Sandoz Finance activities in the US. In 1990, he became Group Treasurer of Sandoz Ltd., Basel, Switzerland, and, in 1993, Head of Group Finance and Member of the Sandoz Executive Board. Following the formation of Novartis in 1996, he assumed his current position as Chief Financial Officer and member of the Group Executive Committee. Raymund Breu is also a member of the Board of Directors of the SWX Swiss Exchange and of its admission panel and its takeover commission.

Paul Choffat, JD

Swiss, age 53

Paul Choffat holds a JD from the University of Lausanne, Switzerland, and an MBA from the International Institute for Management Development in Lausanne. He started his professional career with Nestlé in Zurich, Switzerland, and London, UK. From 1981 to 1985, he was a project manager at McKinsey & Company in Zurich. Between 1987 and 1994, he held a number of leading positions at Landis & Gyr in Zug, Switzerland, where he became a member of the Executive Board and Head of the Communications Division. In 1994, he moved to Von Roll in Gerlafingen, Switzerland, as CEO. Paul Choffat joined Sandoz in 1995 as Head of Management Resources and International Coordination. He subsequently became a member of the Executive Board and was responsible for Group Planning and Organization. During the Novartis merger he headed the integration office. In 1996, he returned to line management as CEO of Fotolabo SA, Montpreveyres-sur-Lausanne, Switzerland, where he remained for three years before becoming an entrepreneur and private investor in 1999. He rejoined Novartis in 2002 as Head of Novartis Consumer Health and member of the Group Executive Committee.

Thomas Ebeling

German, age 43

Thomas Ebeling graduated from the University of Hamburg with a degree in psychology. From 1987 to 1991, he held several positions of increasing responsibility at Reemstma Germany. In 1991, he joined Pepsi-Cola Germany as Marketing Director. He became Marketing Director for Germany and Austria in 1993 and was National Sales and Franchise Director for Pepsi's retail and on-premise sales from 1994. He then served as General Manager of Pepsi-Cola Germany. In 1997, Thomas Ebeling joined Novartis as General Manager of Novartis Nutrition for Germany and Austria. After having served as CEO of Novartis' global nutrition operations, he became Head of Novartis Nutrition worldwide, then Head of Novartis Consumer Health worldwide, and then Chief Operating Officer of Novartis Pharmaceuticals, before attaining his present position.

Prof. Mark C. Fishman, MD

American, age 52

Mark Fishman is a graduate of Yale College and Harvard Medical School. He completed his Internal Medicine Residency, Chief Residency, and Cardiology training at the Massachusetts General Hospital. He serves on several editorial boards and has worked with national policy and scientific committees including those of the NIH and Welcome Trust. He has been honored with many awards and distinguished lectureships and is a Fellow of the American Academy of Arts and Sciences. Before joining Novartis, Mark Fishman was Professor of Medicine at Harvard Medical School and Chief of Cardiology and Director of the Cardiovascular Research Center at the Massachusetts General Hospital.

Norman C. Walker

British, age 50

Norman Walker earned a degree in Business Studies at the University of Brighton, UK, in 1975 and attended the Harvard International Senior Management Program in 1994. He started his professional career with Ford Motor Co in London in 1975. Over a period of 9 years he held a number of posts in human resources (HR) management before he joined GrandMet in London in 1984 where he assumed HR responsibilities in various of their business units. Norman Walker subsequently joined Kraft Foods in 1991 and held a number of leading HR positions in Germany, the United States and Switzerland. More specifically, he headed HR activities for commercial and manufacturing operations in 26 countries and maintained a dynamic HR effort there during a period of significant change, as the company acquired, merged and refocused its business portfolio. Norman Walker joined Novartis in the spring of 1998 in his current role.

Business Unit[1] Heads

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
David Epstein, BSc, MBA American, 41	Oncology (since 2000)	1989	Chief Operating Officer and member of the Executive Committee of Novartis Pharmaceuticals Corporation USA	Bachelor of Science, Pharmacy (Rutgers University) and MBA (Columbia University)
Anthony Rosenberg BSc, MSc British, 49	Transplantation and Immunology (since 2001)	1980	Various leading positions with Sandoz UK and Novartis Group	Bachelor of Science (University of Leicester) and Master of Science (University of London)
Luzi von Bidder[2] MA Econ. Swiss, 49	Ophthalmic (since 1986)	1979	Region Head Europe for CIBA Vision	Graduate of Business School (St. Gallen, Switzerland)
Peter Hewes BA Econ. British, 55	Mature Products (since 2000)	1976	Regional European Head of Novartis Pharma; Country Head of Sandoz Portugal	Bachelor of Arts, Economics (University of Reading, UK)
Christian Seiwald MBA Austrian, 47	Generics (since 2001)	1982	Country Head of Novartis Austria; Head of Novartis Austria Pharma Operations	Graduate in Economics (Innsbruck University, Austria)
Michel Orsinger MBA Swiss, 45	OTC (since 2002)	1993	Senior Vice-President Europe, Middle East and Africa for Novartis' Nutrition and OTC Business Unit; General Manager Sandoz Nutrition Unit Switzerland	Graduate of Business School (St. Gallen, Switzerland)
Kurt T. Schmidt BSc, MBA American, 45	Animal Health (since 2002)	2002	General Manager Food for Kraft Foods Germany; Marketing Director Wrigley Company for German-speaking Europe, Eastern Europe and the Middle East	Bachelor of Science (United States Naval Academy, Annapolis) and MBA (University of Chicago)
Frank Palantoni BSc, MBA American, 45	Infant & Baby (since 2002)	1998	President and CEO of Gerber US Marketing; management positions with Procter & Gamble, Nabisco and Groupe Danone	Bachelor of Science (Tufts University) and MBA (Columbia University)
Michel Gardet MA Business French, 45	Medical Nutrition (since 2002)	1991	General Manager of Novartis Consumer Health Iberia; Head of Health and Functional Nutrition Novartis	Graduate of the Ecole Supérieure de Commerce Paris
Joseph T. Mallof BSc, MBA American, 51	CIBA Vision (since 2002)	2002	Regional President of S.C. Johnson & Son for the Americas Asia Pacific; General Manager of Procter & Gamble in Japan and the Philippines	Bachelor of Science (Purdue University) and MBA (University of Chicago)

[1] In 2002, the following Executives retired from or terminated their employment with the Novartis Group: Gilbert Wenzel, PhD (Executive Committee Member), Glen Bradley, PhD (Business Unit Head) and Hans-Beat Guertler (Business Unit Head).
[2] As of 2003: Flemming Ørnskov.

Further Information on Corporate Governance

The list below contains references to additional information on the Corporate Governance of Novartis.

Topic	Location
Share Capital and Convertible Bonds	
Capital structure	Articles of Incorporation of Novartis AG (http://www.novartis.com/investors/en/governance.shtml)
Share capital movements	Notes 17 of the Group's consolidated financial statements
Convertible bonds	Notes 18 of the Group's consolidated financial statements
Shareholder rights	
Information on the Novartis share and on the shareholders' participation rights	Operating and Financial Review (see page 98) Articles of Incorporation of Novartis AG (http://www.novartis.com/investors/en/governance.shtml) Investors Relations Information: http://www.novartis.com/investors
Board of Directors and Executive Committee	
Internal organization and allocation of responsibilities	Board Regulations and Board Committee Charters (http://www.novartis.com/investors/en/governance.shtml)
Further information	
Sources for further information and anticipated key reporting dates in 2003	(http://www.novartis.com/investors/en/governance.shtml)

...strategy at work...

Children's chess club, Moscow

Operating and Financial Review

Key financial developments in 2002

- **Group sales up 11% in local currencies (2% in CHF) driven by strong growth in Pharmaceuticals and Generics**
- **Pharmaceuticals consistently outperforms industry average in virtually all major markets throughout 2002, delivering sales growth of 13% in local currencies (4% in CHF), due to cardiovascular and oncology franchises and new product launches**
- **Dynamic growth in Generics (25% in local currencies) as a result of geographic expansion and successful product launches**
- **Operating income climbs 8% in CHF – faster than sales owing to enhanced productivity and successful cost management**
- **Net income up 4%, due to strong operating performance and a very satisfactory level of financial income amid continued adverse market conditions**
- **Earnings per share rose 7%, supported by share repurchase program**
- **Acquisition of a further 11.4% of Roche Holding AG's voting shares raising ownership of Roche voting shares to 32.7%**
- **Operating cash flow rose 11% and free cash flow 10%**
- **Switch to reporting in US dollars foreseen as of first quarter 2003**

	2002 CHF millions	2001 CHF millions	% Change
Sales	**32 412**	**31 643**	**2**
Operating income	**7 887**	**7 277**	**8**
Net income	**7 313**	**7 024**	**4**
Change in net liquidity	-3 689	-1 120	
Equity at year-end	39 682	42 245	
Earnings per share (CHF)	2.91	2.73	7
Dividends per share (CHF)	0.95	0.90	6

This operating and financial review should be read in conjunction with the consolidated financial statements. The consolidated financial statements and the financial information discussed below have been prepared in accordance with International Accounting Standards (IAS). For a discussion of the significant differences between IAS and US GAAP, see note 31 of the consolidated financial statements.

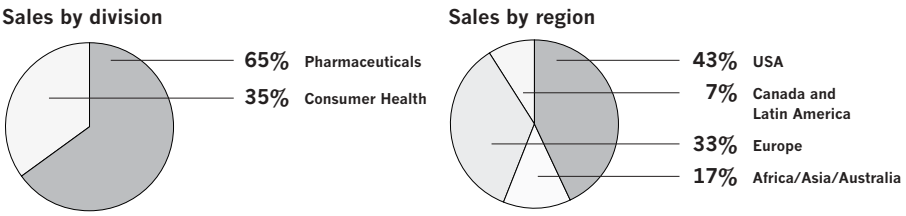
Factors affecting results

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 under increasing pressure to reduce prices as payors in the public and private sectors seek to curb rising healthcare costs.

Novartis Group revenues are directly related to the Group's ability to identify high potential products while they are still in development and to bring them to market quickly and effectively. Efficient and productive research and development is crucial in this environment as Novartis, like its competitors, searches for efficacious and cost-efficient pharmaceutical solutions to health problems. The necessity for adequate resources to access the full range of new technologies has been one reason for industry consolidation, and the increase in collaborations 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.

In addition, competitive conditions 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. Pressure on Novartis and other pharmaceutical companies to lower prices is expected to increase primarily as a result of government initiatives to reduce patient reimbursement, restrict prescribing levels, increase the use of generics and impose overall price cuts. The introduction of technologically innovative products and devices by competitors and growing parallel imports, mainly in the EU, pose additional challenges.

Exchange rate exposure also affects the Group's results as Novartis has both sales and costs in many currencies other than the Swiss franc. This gives rise to both transaction exposure in subsidiary financial statements due to foreign currency denominated transactions and translation exposure from converting foreign subsidiary results and balance sheets into the Group's Swiss franc consolidated financial statements. The Group's results have not been significantly affected by inflation.



Critical accounting policies

The Novartis Group's principal accounting policies are set out in note 1 of the Group's consolidated financial statements and conform with International Accounting Standards (IAS). Significant judgments and estimates are used in preparation of the consolidated financial statements which, to the extent that actual outcomes and results may differ from these assumptions and estimates could affect the accounting in at least the following areas.

Long-lived assets are regularly reviewed for impairment, including identifiable intangibles and goodwill, whenever events or changes in circumstance indicate that the balance sheet carrying amount of the asset may not be recoverable. In order to assess if there is any impairment, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposition. If the balance sheet carrying amount of the asset is more than the higher of its value in use to Novartis or its net selling price, an impairment loss for the difference is recognized. Actual outcomes could vary significantly from such estimates of discounted future cash flow. Factors such as changes in the planned use of buildings, machinery or equipment, or closing of facilities or lower than anticipated sales for products with capitalized rights could result in shortened useful lives or impairment.

The Novartis Group has extensive investments in marketable securities and has significant derivative financial instrument positions which are mainly, but not exclusively, held for hedging underlying positions. Under current IAS accounting rules unrealized gains and losses on marketable securities and cash flow related derivative financial instruments that qualify for hedge accounting are recorded in separate components of equity and not in the income statement. Group management regularly reviews such positions to determine the extent to which unrealized losses are temporary. Depending on the stock market and other factors at the time of this review it may be necessary to treat certain of the unrealized losses as permanent and transfer these losses out of the equity component into the Group's income statement.

Novartis has investments in associated companies (generally investments of between 20% and 50% of a company's voting shares) that are accounted for by using the equity method. Due to the various estimates that have been made in applying the equity method, the amounts recorded in the consolidated financial statements in respect of Roche Holding AG and Chiron Corporation may require adjustments in the following year as more financial and other information becomes publicly available.

The Novartis Group sponsors pension and other retirement plans in various forms covering employees who meet eligibility requirements. These plans cover the majority of Group employees. Several statistical and other factors which attempt to anticipate future events are used in calculating the expense and liability related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases, as determined by Group management within certain guidelines. In addition, the Group's actuarial consultants also use statistical information such as withdrawal and mortality rates to estimate these factors. The actuarial assumptions used may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. These differences may result in a significant impact to the amount of pension income or expense recorded in future years.

The Group has provisions for environmental remediation costs. The material components of the environmental provisions consist of a risk assessment based on investigation of the various sites. 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 waste 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. Group management believes that such costs will not materially affect the Group's consolidated financial position, results of operations or cash flow.

A number of Novartis Group subsidiaries are subject to litigation arising out of the normal conduct of their businesses, as a result of which claims could be made against them which might not be covered by existing provisions or by insurance. Group management believes that the outcomes of such actions will not materially affect the Group's consolidated financial position, results of operations or cash flow.

The International Accounting Standards Board is entering a period of critically examining current International Accounting Standards with a view to increasing international harmonization of accounting rules. This process of amendment and convergence of worldwide accounting rules could result in significant amendments to the existing rules within the next two years in such areas as the timing of recognition of sales and other revenues arising from collaborative agreements with marketing and distribution partners, accounting for share based compensation, goodwill and intangibles, employee benefit plans, marketable securities and derivative financial instruments and classification of balance sheet positions as debt or equity.

Results of operations

	Year ended Dec 31, 2002 CHF millions	Year ended Dec 31, 2001 CHF millions	Change in %
Sales	**32 412**	**31 643**[1]	**2**
Cost of goods sold	-7 618	-7 886	-3
Marketing and distribution	-10 987	-10 703[1]	3
Research and development	-4 339	-4 189	4
Administration and general overheads	-1 581	-1 588	0
Operating income	**7 887**	**7 277**	**8**
Income from associated companies	-10	139	
Financial income, net	949	1 067	-11
Income before taxes and minority interests	**8 826**	**8 483**	**4**
Taxes	-1 490	-1 440	3
Income before minority interests	**7 336**	**7 043**	**4**
Minority interests	-23	-19	21
Net income	**7 313**	**7 024**	**4**

[1] Restated to reflect a change in the classification of certain sales incentives and discounts to retailers: In 2001, sales have been reduced by a total of CHF 395 million with a corresponding reduction in Marketing & Distribution expenses.

In Swiss francs, Group sales in 2002 increased by 2% over 2001 to CHF 32.4 billion (+11% in local currencies); operating income grew by 8% to CHF 7.9 billion; net income also increased by 4% to CHF 7.3 billion and free cash flow (excluding acquisitions of subsidiaries and the voting shares of Roche Holding AG) rose by 10% in Swiss francs to CHF 4.5 billion.

Pharmaceuticals accounted for 65% of the Group's total sales and Consumer Health 35%. The two divisions generated 78% and 22% of divisional operating income, respectively.

Geographically, 47% of sales were generated in the NAFTA region (43% in the USA), 33% in Europe and 20% in the rest of the world.

Sales growth was driven by a volume increase of 10%. All business units except Generics and CIBA Vision benefited from small price increases which in total amounted to 1%. The sales increase due to acquisitions was negligible. The sales performance in Swiss francs suffered from a 9% negative currency effect as the Swiss franc rose on average 8% against the US dollar, 10% against the yen and 3% against the Euro.

The Group operating margin in 2002 was 24.3% of sales, an increase of 1.3 % percentage points over the 23.0% of sales of the previous year. Productivity gains and improvements in the product mix lead to a 3% reduction in the cost of goods sold, while marketing and distribution expenses increased by 3%, slightly more than sales, to support product launches and key growth drivers. Research and development investments were increased 4% mainly due to the new Pharmaceuticals Division research strategy and the establishment of the new facility in Cambridge, USA. As a result of all these factors, operating income increased overproportionally, climbing 8% in Swiss francs to CHF 7.9 billion.

Sales

	Year ended Dec 31, 2002 CHF millions	Year ended Dec 31, 2001 CHF millions	Change in CHF %	Change in local currencies %
Pharmaceuticals	**21 002**	**20 181**	**4**	**13**
Generics	2 809	2 433	15	25
OTC	2 359	2 538[1]	-7	-1
Animal Health	971	962	1	10
Medical Nutrition[2]	1 109	1 115[1]	-1	4
Infant & Baby	2 075	2 227[1]	-7	3
CIBA Vision	1 762	1 787	-1	6
Consumer Health – ongoing	**11 085**	**11 062**	**0**	**6**
Divested Health & Functional Food activities	325	400		
Consumer Health	**11 410**	**11 462**	**0**	**7**
Total	**32 412**	**31 643**	**2**	**11**

[1] Restated to reflect a change in the classification of certain sales incentives and discounts to retailers: In 2001, sales have been reduced by a total of CHF 395 million (CHF 129 million, CHF 50 million and CHF 216 million for OTC, Medical Nutrition, and Infant & Baby, respectively) with a corresponding reduction in Marketing & Distribution expenses.
[2] Including Nutrition & Santé

Pharmaceuticals Division

Sales increased 4% in Swiss francs or 13% in local currencies from CHF 20.2 billion in 2001 to CHF 21.0 billion in 2002, driven in particular by the cardiovascular and oncology businesses, where *Diovan, Lotrel, Lescol, Gleevec/Glivec, Zometa* and *Sandostatin* were the main growth drivers.

The introduction of new products, such as *Elidel, Zometa* and *Zelnorm/Zelmac,* together with the addition of new strengths and new indications to existing brands all contributed to lifting sales. Double-digit sales growth was achieved in all regions, including Japan despite government mandated price decreases. In Europe, strong performances in Spain and France offset the effects of pricing pressures in several countries, mandatory generic substitution in Germany and the effects of parallel imports.

Diovan (hypertension) posted sales of CHF 2.6 billion, making it Novartis' best selling product ever. Extending its leadership of the angiotensin-2 receptor blocker category in the US, it became the first and only drug of its kind to receive approval there for treatment in heart failure patients. To add further choice and flexibility, a new higher dose (160/25) formulation of *Co-Diovan* was launched in the US. Novartis' second flagship antihypertensive, *Lotrel,* generated sales of CHF 1.0 billion, lifted by the July launch of a new formulation (10 mg amlodipine + 20

mg benazepril HCl). The third main pillar of the cardiovascular franchise, *Lescol* (cholesterol reduction) posted sales of CHF 896 million. The brand's strong growth in Europe and other regions has been driven by its particularly favorable risk/benefit profile and convenient XL extended-release formulation.

In Oncology, *Gleevec/Glivec* gained approval in the US, the EU and Japan for first-line use in treating certain forms of chronic myeloid leukemia (CML). It also received approval early in the year for use in gastrointestinal stromal tumors (GIST). Exceeding expectations, *Gleevec/Glivec* sales reached CHF 953 million, making it Novartis' number five product. Another leading Oncology brand, *Sandostatin* continued to post substantial double-digit growth, with sales reaching CHF 943 million, despite the launch of generic competitors in Europe. *Zometa* (bone metastases and complications of a broad range of cancers), achieved sales of CHF 758 million. *Zometa* is the more potent and convenient successor to *Aredia,* which is facing patent expiry. The new drug gained EU and US approvals for a broader range of cancer settings, and is approaching or has exceeded the previous sales level of *Aredia* in many markets.

In Transplantation, the *Neoral* franchise was underpinned by market share gains in Japan and yielded sales of CHF 1.6 billion. It continues to compete strongly against branded and generic competition owing to a reluctance among physicians to switch patients who are stable and doing well on *Neoral.*

The Mature Products business continued to report only a modest decline in sales on a comparable basis as a result of focused investments on selected key products and markets. Of the leading brands the anti-inflammatory *Voltaren* continued to compete well against generics and the COX-2 inhibitor class of drugs and achieved sales of CHF 925 million.

Overall, the Pharmaceutical Division's top ten products generated CHF 11.7 billion, reflecting an increase of 32% in local currencies, while the top twenty products expanded sales by 17% to CHF 16.4 billion.

Primary Care

Primary care sales grew 13% in local currencies (+5% in CHF) primarily due to strong sales growth of *Diovan* and the other key products discussed below.

Diovan (+49%, US: +40%; hypertension) became Novartis' best selling product ever, further extending its category leadership in the US to more than 35% of total prescriptions. Backed by the Val-Heft study data showing improved survival, reduced hospitalization and cost efficacy benefits, *Diovan* became the first and only drug of its kind to receive approval for treatment in heart failure patients. To complement the broad choice and flexibility for patients and physicians, a new higher dose (160/25) formulation of *Co-Diovan* was launched in the US.

Lotrel (35% US: +35%; hypertension), also extended its share of new prescriptions. A new formulation (10 mg amlodipine + 20 mg benazepril HCl) was launched in July and has been well received by physicians and patients, reflecting the fact that 90% of *Lotrel* patients achieve their blood pressure goal with the additional benefits of an ACE inhibitor.

Lescol (+18%, US: +13%; cholesterol reduction) sales grew strongly in Europe and in other regions, reflecting the drug's particularly favorable risk/benefit profile and convenient XL extended-release formulation. Following the publication of data showing that *Lescol* reduced the risk of serious cardiac events after surgery to unblock coronary arteries, a new indication in angioplasty patients was filed in August for regulatory approval in the US.

Lamisil (+4%, US: -3%; fungal infections) sales picked up towards the end of the year mainly in the US. Whilst the onychomycosis market segment has been declining, *Lamisil* has extended its commanding share of both total and new prescriptions in the US to more than 80%.

Elidel (eczema) was launched in 13 countries, including the US, and completed the mutual recognition procedure in Europe. Sales in 2002 reached CHF 148 million. Within just six months, this highly effective, non-steroid cream has become the number-one branded topical treatment for eczema in the US, where it has captured over 8% of new prescriptions. In Denmark, the first country in Europe where it has been launched, *Elidel* captured a 9% share of its segment within 10 weeks of launch.

Exelon (+26%, US: +28%; Alzheimer's disease) posted good sales growth and captured a further share both of new and total prescriptions in the US. New marketing initiatives are under way to counter increased competition in its fast-growing segment. Studies revealed that *Exelon* inhibits an additional enzyme (butyrylcholinesterase) that contributes to neurological dysfunction in Alzheimer's disease. As a result, an expanded labeling was approved in Europe to include the product's unique dual inhibition properties.

Zelnorm/Zelmac (constipation prone irritable bowel syndrome) has now gained approval in 28 countries including the US where it was launched in September. With progress being made on reimbursement, 2002 sales totaled CHF 70 million.

Oncology

Novartis Oncology gained further market share and posted strong sales growth of 28% in local currencies (+19% in CHF).

Gleevec/Glivec, for treating certain forms of chronic myeloid leukemia (CML) and gastrointestinal stromal tumors (GIST), continued to bring benefits to thousands of patients in more than 80 countries. Exceeding expectations, 2002 sales reached CHF 953 million, making it Novartis's fifth biggest product. *Gleevec/Glivec* obtained approval as first-line treatment in the US, EU and Switzerland, and major progress was achieved on reimbursement, especially in the UK, Australia and New Zealand.

Zometa (complications of a broad range of cancers), achieved sales of CHF 758 million, making it the world's fastest growing bisphosphonate used for bone metasteses. More potent and convenient than *Aredia, Zometa* has gained EU and US approvals for a broader range of cancer settings, and is approaching or has exceeded the previous sales level of *Aredia* in many markets.

Aredia (bone metastases; -64%; US: -84%) sales reflect the successful launch and superiority of *Zometa* and the anticipated competition from multiple generic entrants in several markets.

Sandostatin continued to post substantial double-digit growth, with sales up 23% (US: +39%) to CHF 943 million despite the launch of generic competitors in Europe. Growth was driven by sustained market penetration of the convenient, long-acting, once-a-month 'LAR' formulation.

Femara, the first-line therapy for advanced breast cancer in postmenopausal women, posted a 37% (US: +55%) rise in sales to CHF 271 million. *Femara* is the US leader in the first-line metastatic breast cancer setting.

Ophthalmics

Ophthalmics' sales rose 7% in local currencies (-1% in CHF), driven by *Visudyne.*

Visudyne (+27%; US: +19%; treatment in macular degeneration) posted sales of CHF 443 million, and has now been approved in more than 65 countries for its main indication and in more than 45, including the EU, US and Canada, for additional indications.

Transplantation

Sales decreased 4% in local currencies (-11% in CHF) as a result of branded and generic competition to the *Neoral* franchise. Their impact however continues to be limited by the importance physicians attach to avoiding fluctuations in drug concentrations in patients who are stable and doing well on *Neoral.*

Neoral/Sandimmun, sales (the cornerstone drug for immunosuppression), (-5%; US: -12%) were underpinned by market share gains in Japan, which partly offset price pressures and branded competition in other regions.

Simulect, the induction immunosuppressant designed to complement *Neoral,* posted a 21% rise in sales (US: +4%) following its successful launch in Japan and continued market segment share gains from established competitor brands in most regions.

Myfortic, a new formulation for preventing organ rejection in kidney transplantation, gained first approvals in Switzerland, Brazil, India and Australia while ***Certican,*** a novel drug that targets primary cancer of chronic rejection, was submitted for approval in the EU and US.

Mature Products

The mature brands reported a 10% sales rise in local currencies (no increase in CHF) due to a switch of products into this business unit and as a result of focused investments on selected key products and markets.

Voltaren (-3%, US: -18%; anti-inflammatory) continued to compete well against generics and the COX-2 inhibitor class of drugs.

Cibacen/Lotensin/Cibadrex (antihypertensive) continued to deliver positive results as sales climbed 9% (US: +14%) mainly as a result of renewed external field-force support in the US.

Top twenty Pharmaceuticals Division Products – 2002

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	1 212	40	1 368	58	2 580	37	49
Neoral/Sandimmun	Transplantation	426	-12	1 181	-2	1 607	-12	-5
Lamisil (group)	Fungal infections	653	-3	702	12	1 355	-4	4
Lotrel	Hypertension	1 011	35			1 011	24	35
Gleevec/Glivec	Chronic myeloid leukemia	330	103	623	741	953	271	303
Sandostatin (group)	Acromegaly	439	39	504	12	943	16	23
Voltaren (group)	Inflammation/pain	18	-18	907	-3	925	-13	-3
Lescol	Cholesterol reduction	405	13	491	23	896	10	18
Zometa	Cancer complications	562	NA	196	NA	758	NA	NA
Cibacen/Lotensin/ Cibadrex	Hypertension	523	14	191	-4	714	1	9
Top ten products		**5 579**	**35**	**6 163**	**28**	**11 742**	**22**	**32**
Miacalcic	Osteoporosis	371	-9	241	-4	612	-13	-7
Tegretol (incl. CR/XR)	Epilepsy	189	-22	376	1	565	-17	-8
Leponex/Clozaril	Schizophrenia	186	-12	315	8	501	-7	0
Exelon	Alzheimer's disease	259	28	213	24	472	17	26
Visudyne	Wet form of age-related macular degeneration	259	19	184	40	443	18	27
HRT Range	Hormone replacement	215	5	222	-10	437	-10	-3
Trileptal	Epilepsy	331	111	102	49	433	73	91
Aredia	Cancer complications	125	-84	303	-27	428	-66	-64
Foradil	Asthma	36	136	371	4	407	4	10
Famvir	Viral infections	244	17	99	7	343	6	14
Top twenty products		**7 794**	**15**	**8 589**	**19**	**16 383**	**9**	**17**
Rest of portfolio		1 120	-6	3 499	0	4 619	-9	-1
Total		**8 914**	**12**	**12 088**	**13**	**21 002**	**4**	**13**

NA – Not applicable as no or insignificant prior year sales.

Consumer Health Division

Sales of the Consumer Health Division increased in local currencies by 7%, however, fell slightly in Swiss franc terms from CHF 11.5 billion in 2001 to CHF 11.4 billion in 2002. The following are specific comments on the results of the business units within the Consumer Health division:

Generics

Sales rose 15% in Swiss francs or 25% in local currencies to CHF 2.8 billion, led by the US and Europe, the launch of new products, and expansion into new markets.

The retail generics business with finished forms lifted sales by 35% in local currencies, driven by the US performance and new launches, in particular *AmoxC* in the US, Geneva's generic form of the anti-infective Augmentin®. The introduction of other products, including mefloquine (malaria), nabumetone (inflammation), metformin (diabetes), fluoxetine (depression), lisinopril and lisinopril HCTZ (hypertension) also fuelled growth. Sales in Europe grew dynamically, particularly in France, Italy and the Netherlands, due to several launches including the ulcer treatment omeprazole.

The industrial generics franchise posted an increase of 1% in Swiss francs and a 3% increase in local currencies. A new biopharmaceuticals franchise was added, focused on the manufacture of active ingredients, mostly modern recombinant products.

In November, the business unit successfully completed its friendly take-over bid for Lek Pharmaceuticals d.d., Slovenia's leading drug-maker. The CHF 1.3 billion acquisition opens up a leading position for Novartis Generics in Eastern Europe. No sales have been recorded from this acquisition in 2002 due to their negligible amount and the fact that Novartis is still in the process of integrating Lek into its reporting system.

OTC (over-the-counter medicines)

Sales were 7% off their 2001 level in Swiss francs or down 1% in local currencies. Excluding terminated, acquired, in-licensed and transferred businesses, the underlying sales growth was 3% in local currencies, driven by the key brands *Lamisil* (antifungal), *Voltaren* (analgesic), *Otrivin* (nasal decongestant) and *Nicotinell/Habitrol* (smoking cessation). These products compensated for the weak cough and cold season in the US earlier in 2002 and a drop in *Calcium Sandoz* sales resulting from reimbursement issues in Europe and Mexico.

Animal Health

Sales were up 1% in Swiss francs or 10% in local currencies to CHF 971 million, driven by double-digit growth in Latin America and the US, where the vaccine businesses acquired in January were the main contributors. Overall, acquisitions contributed approximately 6 percentage points to local currency sales growth. The companion animal franchise was driven by strong sales of *Interceptor* (worm treatment) and *Fortekor* (cardio-renal drug), complemented by a number of new launches in key markets, including *Atopica,* for atopic dermatitis in dogs, and *Deramaxx,* the first COX-2 product for pain control in dogs and *Milbemax,* for intestinal parasites in cats and dogs. Sales in the farm animal franchise were driven by the therapeutic anti-infectives, the strong performance in Latin America and the recovery in the UK from the foot and mouth epidemic of 2001. The acquisition of Grand Laboratories and ImmTech in the US boosted the vaccines and aquahealth franchise, which delivered a strong rise in sales and now represents 8% of Animal Health's revenues.

Medical Nutrition (including Nutrition & Santé)

Combined sales reached CHF 1.1 billion, down 1% in Swiss francs but up 4% in local currencies.

Double digit growth in Europe lifted Medical Nutrition sales, which were driven by the strong performance of Enteral Nutrition *(Isosource* and *Novasource)* and additional sales impetus from the Medical Food franchise *(Resource).* In Nutrition & Santé, sales growth from the core-brands offset the impact of distributor changes in China and Italy, while Sports Nutrition sales were lifted by the introduction of *Isostar* 'Fast Hydration'. Within Medical Nutrition the Health Food & Slimming and Sports Nutrition businesses are regrouped as of January 1, 2003 into the new Nutrition & Santé stand-alone unit to optimize its business potential and to prepare for future divestment.

Infant & Baby

Although sales fell 7% in Swiss franc terms, in local currencies they grew above the industry average (+3%) to CHF 2.1 billion. The major contributor was *Gerber* in the US, spurred by innovations in the *Juice, Graduates,* and *Tender Harvest* lines and the outstanding success of *Lil' Entrees,* a new line of microwavable convenience trays targeted at the toddler segment. *Gerber's* revenues from this segment increased 5%. Despite the *Baby Care* business competing against private label entries it achieved a record market share in this segment and the *Gerber Wellness* line of skincare and healthcare products achieved a 7% rise in sales helped by the successful re-launch of its infant skin care line.

CIBA Vision

Sales fell 1% in Swiss franc terms but rose 6% in local currencies to CHF 1.8 billion, driven by the high-volume lens franchise, which outpaced the market. *Focus DAILIES* and *NIGHT & DAY* lenses posted dynamic sales growth and maintained leadership of the daily disposables and continuous wear categories. *FreshLook* colored lenses led the growing cosmetic lens segment, supported by the launch of the *FreshLook Radiance* line in several markets including the US from December. *Focus DAILIES Toric,* the world's first and only daily disposable lens for astigmatism correction, was launched in Europe and is in the process of being introduced in the US.

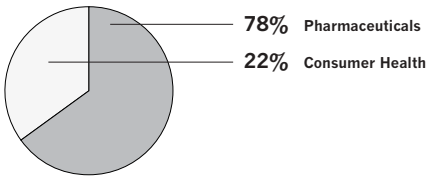
The lens-care franchise continued to compete in a shrinking market mainly in the US. Sales declined, but were underpinned by increases in certain countries and the roll-out of *FreshLook Care* in Japan.

The ophthalmic surgical business was lifted by several innovative products including *VisThesia,* a combination viscoelastic gel and anesthetic, which may help shorten cataract surgeries, *Vivarte PRESBYOPIC* phakic refractive lens; and an improved convenient injector system for the *PRL* phakic refractive lens.

Divested Health & Functional Food activities

Sales of divested Health & Functional Food activities, principally the Food & Beverage business, including the Ovaltine, Caotina, Lacovo brands, which was divested at the end of November 2002 to Associated British Foods (ABF) for CHF 402 million, amounted to CHF 325 million (2001: CHF 400 million).

Operating income by division



Operating income

	Year ended Dec 31, 2002 CHF millions	% of sales	Year ended Dec 31, 2001 CHF millions	% of sales	Change %
Pharmaceuticals	**6 022**	**28.7**	**5 677**	**28.1**	**6**
Generics	406	14.5	281	11.5	44
OTC	374	15.9	452	17.8	-17
Animal Health	144	14.8	138	14.3	4
Medical Nutrition[1]	6	0.5	87	7.8	-93
Infant & Baby	355	17.1	388	17.4	-9
CIBA Vision	183	10.4	174	9.7	5
Consumer Health – ongoing	**1 468**	**13.2**	**1 520**	**13.7**	**-3**
Divested Health & Functional Food activities	216		-7		
Consumer Health	**1 684**	**14.8**	**1 513**	**13.2**	**11**
Corporate income, net	181		87		108
Total	**7 887**	**24.3**	**7 277**	**23.0**	**8**

[1] Including Nutrition & Santé

Group operating income increased by 8% from CHF 7.3 billion in 2001 to CHF 7.9 billion in 2002.

The Group operating margin was 24.3% of sales, an increase of 1.3 percentage points compared with 2001 (23.0%).

Pharmaceuticals Division

Pharmaceuticals' operating income rose 6% to CHF 6.0 billion in 2002 with the division's operating margin improving by 0.6 percentage points over the year to 28.7%. As a percentage of sales, the cost of goods sold improved 1.2 percentage points due to product mix changes and productivity gains. Marketing & distribution investments increased slightly as a percentage of sales to drive the introduction of *Elidel* and the launch of *Zelnorm* in the US. Implementation of the new research strategy and the establishment of the new Boston facility led to a 4% increase in research & development investments, which remained at 17% of sales. Included in administration and general overheads were currency hedging gains of CHF 267 million which were offset by CHF 314 million of impairment charges against the goodwill of the division's biotechnology investments (Genetic Therapy Inc., Systemix Inc., and Imutran Ltd. acquisitions from 1995 and 1996) due to the aforementioned change in research and development strategy, and a CHF 80 million additional impairment charge against the pitavastatin marketing rights acquired in 2001. These impairment charges have been determined based on discounted cash flow models of the expected future sales arising from these activities.

Consumer Health Division

The division's operating income has increased by 11% over the year from CHF 1.5 billion in 2001 to CHF 1.7 billion in 2002. The division's ongoing operating income, excluding the impact of the divested Health & Functional Food activities, has fallen by 3% to CHF 1.47 billion. As explained below, increases in the operating income of Generics, Animal Health and CIBA Vision business units have been offset by falls in the division's other business units.

Generics

Operating income increased significantly by 44% over 2001, fuelled by top-line growth, productivity gains and a stronger focus on higher margin products. Although regional sales forces were expanded and new markets entered, marketing & distribution expenses were reduced as a percentage of sales. Research & development investments increased 27% to CHF 215 million due to product developments and the funding of the new R&D center in Vienna. The positive trend of sales and functional costs, and the non-recurrence of acquisition-related costs last year, lifted the operating margin 3 percentage points to 14.5%. There has been no contribution to operating income from the recently completed Lek acquisition.

OTC

Operating income dropped 17% over the year to CHF 374 million, as a result of lower sales volumes and increased general & administration expenses due primarily to the Divisional reorganization announced in February and exit costs from a Japanese joint venture. These were partially offset by reduced marketing & distribution expenses. The operating margin fell 1.9 percentage points to 15.9%.

Animal Health

2002 operating income increased 4% to CHF 144 million, leading to an operating margin of 14.8% (2001: 14.3%). Apart from acquisition-related charges, operating costs were reduced significantly as marketing & distribution investments were focused on key new launches, whilst research & development investments were maintained as a percentage of sales.

Medical Nutrition (including Nutrition & Santé)

Operating income fell 93% to CHF 6 million as a result of restructuring provisions of CHF 40 million and a one-time provision for potential additional value-added tax charges in

Germany. As a result, the operating margin fell to 0.5% from 7.8% in 2001. Excluding the exceptional items of CHF 66 million operating income would have been CHF 72 million and have produced an operating margin of 6.5%.

Infant & Baby

2002 operating income fell 9% to CHF 355 million. Operating income was affected by one-off goodwill impairment charges of CHF 39 million primarily related to the Hiborn acquisition in Brazil of 1998. As a result, the operating margin fell to 17.1% from 17.4% in 2001. Excluding this impairment of CHF 39 million, the operating margin would have been 19.0%.

CIBA Vision

Operating income reached CHF 183 million. Investments in marketing & distribution were increased to power new launches and advertising campaigns. Research & development investments slightly increased as the business unit focused on the development of new products and lens production technology. Operating margin increased slightly to 10.4% in 2002 compared with 9.7% in 2001.

Divested Health & Functional Food activities

The operating income of CHF 216 million includes the divestment gain of CHF 205 million, after related restructuring charges arising on the divestment of the Food & Beverage business, and the normal operating income from these activities offset by CHF 28 million of goodwill impairment charges in connection with this divestment.

Corporate and Other Income/Expense

This includes the costs of corporate management, income resulting from charging share and share option plan costs to the operating companies, and pension income. Net corporate income increased from CHF 87 million in 2001 to CHF 181 million in 2002.

Operating expenses

	Year ended Dec 31, 2002 CHF millions	Year ended Dec 31, 2001 CHF millions	Change %
Sales	**32 412**	**31 643**	**2**
Cost of goods sold	-7 618	-7 886	-3
Marketing & distribution	-10 987	-10 703	3
Research & development	-4 339	-4 189	4
Administration & general overheads	-1 581	-1 588	0
Operating income	**7 887**	**7 277**	**8**

Cost of goods sold

Cost of goods sold decreased as a percentage of sales from 24.9% in 2001 to 23.5% in 2002. This was mainly due to continued improvements in productivity and a favorable product mix in Pharmaceuticals.

Marketing & distribution

Marketing & distribution expenses as a percentage of sales increased by 0.1% over 2001 to 33.9% of sales as slightly higher investments in the Pharmaceutical division field force and promotional activities were offset by reductions in the Consumer Health division.

Research & development

Research & development expenses as a percentage of sales were 13.4% in 2002, a small increase over the 2001 level of 13.2%.

Administration & general overheads

Cost containment, especially in Pharmaceuticals, and the recording of CHF 267 million of hedging gains, resulted in a negligible increase in administration & general overheads. As a percentage of sales, administration & general overheads fell to 4.9% in 2002 from 5.0% in 2001.

Net income

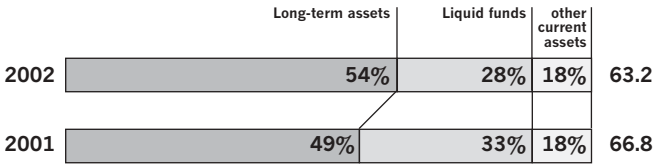
	Year ended Dec 31, 2002 CHF millions	Year ended Dec 31, 2001 CHF millions	Change %
Operating income	**7 887**	**7 277**	**8**
Income from associated companies	-10	139	
Financial income, net	949	1 067	-11
Income before taxes and minority interests	**8 826**	**8 483**	**4**
Taxes	-1 490	-1 440	3
Income before minority interests	**7 336**	**7 043**	**4**
Minority interests	-23	-19	21
Net income	**7 313**	**7 024**	**4**

Income from associated companies

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 is mainly derived from the Group's investments in Roche Holding AG and Chiron Corporation.

The Group has a 32.7% (2001: 21.3%) interest in Roche voting shares, which represents a 6.2% (2001:4.0%) interest in the total Roche equity. The income statement effect after taking into account the required charges due to additional depreciation

Total assets CHF bn



and amortization arising from allocating the purchase price to tangible and intangible assets and goodwill, resulted in a pre-tax loss of CHF 180 million (2001: CHF 39 million loss).

The Group's 42.0% interest in Chiron contributed pre-tax income of CHF 167 million (2001: CHF 185 million).

The Group's share of the net income of both Roche and Chiron is based upon analysts' estimates for the full year 2002. Any differences between these estimates and actual results will be adjusted in 2003.

Financial income, net

A lower but still attractive level of net financial income, of CHF 949 million, (2001: CHF 1 067 million), was generated in a difficult environment due to good currency management and equity strategies. Gross financial income of CHF 1 144 million (including net income on options and forward contracts and after deducting other financial expense) was CHF 408 million lower than in 2001 because the average level of liquidity has been lower and interest rates were also substantially lower in the current year. This was partially offset by lower interest expense of CHF 301 million (2001: CHF 367 million) and by net currency gains of CHF 106 million (up CHF 224 million from last year). The net currency gain was due to currency gains of CHF 380 million, mainly from US dollar and Japanese yen positions, partially offset by losses in emerging markets.

Taxes

Despite increased profits, the tax charge of CHF 1.5 billion increased only CHF 50 million over the year. Taxes as a percentage of income before tax were 16.9% in 2002 compared to 17.0% in 2001.

Net income

Net income as a percentage of total sales increased, from 22.2% in 2001 to 22.6% in 2002. This was due to margin increases in the operating businesses offsetting lower financial income.

Return on average equity increased from 17.8% in 2001 to 17.9% in 2002, owing to higher net income and lower equity mainly as a result of the acquisition of treasury shares.

Earnings per share

Earnings per share increased by 7%. This was more than the 4% increase in net income due to a lower average number of shares being outstanding during the year as a result of share-buy backs.

Condensed consolidated balance sheets

	Dec 31, 2002 CHF millions	Dec 31, 2001 CHF millions	Change CHF millions
Total long-term assets	33 984	32 585	1 399
Cash, short-term deposits and marketable securities	17 605	22 152[1]	-4 547
Other current assets	11 613	12 024[1]	-411
Total assets	**63 202**	**66 761**	**-3 559**
Total equity	39 682	42 245	-2 563
Financial debts	7 819	8 677[1]	-858
Other liabilities and minority interests	15 701	15 839[1]	-138
Total equity and liabilities	**63 202**	**66 761**	**-3 559**

[1] Restated due to reclassification of the fair value of derivative financial instruments to financial assets and debt.

Total long-term assets increased by CHF 1.4 billion principally due to the CHF 2.4 billion increase in investments in associated companies as a result of increasing the Group's stake in Roche.

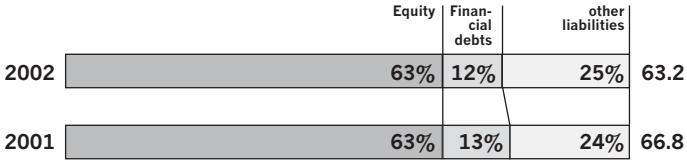
The Group's equity decreased CHF 2.6 billion during 2002 to CHF 39.7 billion at December 31, 2002, as net income (CHF 7.3 billion) only partially offset dividend payments (CHF 2.3 billion), the acquisition of treasury shares (CHF 4.8 billion), translation losses (CHF 1.5 billion) and a CHF 1.3 billion reduction in the fair value reserve for marketable securities and other equity movements. The valuation differences on available-for-sale marketable securities and deferred cash flow hedges fell from unrealized gains of CHF 1.0 billion at December 31, 2001 to unrealized losses of CHF 0.2 billion at December 31, 2002.

Total financial debts fell by CHF 0.9 billion on account of the conversion of CHF 1.2 billion of convertible debt and reduction in short-term debt partially offset by the issue of a EUR 1.0 billion straight bond due 2007. The year-end debt/equity ratio fell slightly from 0.21:1 in 2001 to 0.20:1 in 2002.

Novartis has long-term financial debt principally in the form of bonds. At December 31, 2002 all of the remaining convertible bonds issued by Novartis had been converted, compared with CHF 1.2 billion being outstanding at December 31, 2001. Novartis also had outstanding CHF 3.6 billion in straight bonds at December 31, 2002 compared with CHF 2.3 billion at December 31, 2001. For details on the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements.

The 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.

Total equity & liabilities CHF bn



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.

	2002 CHF millions	2001 CHF millions
Cash flow from operating activities	8 162	7 342
Cash flow used for investing activities	-4 455	-4 675
Cash flow used for financing activities	-6 617	-354
Translation effect on cash and cash equivalents	-99	31
Change in cash and cash equivalents	**-3 009**	**2 344**
Change in short- and long-term marketable securities	-1 538	-940
Change in short- and long-term financial debt	858	-2 524
Change in net liquidity	**-3 689**	**-1 120**
Net liquidity at January 1	13 475	14 595
Net liquidity at December 31	**9 786**	**13 475**

The cash flow from operating activities increased by CHF 0.8 billion (11%) to CHF 8.2 billion mainly as result of higher net income and increased non-cash expenses. Depreciation, amortization and impairment charges increased by CHF 0.3 billion to CHF 2.1 billion. Current tax payments were CHF 181 million lower than prior year despite an increase of the total tax charge of CHF 50 million.

The cash outflow due to investing activities was CHF 4.5 billion, only marginally below last year. CHF 4.2 billion was spent to increase the strategic investment in Roche and for the acquisition of Lek. The net investment in tangible assets accounted for CHF 1.7 billion. The net proceeds from sale of marketable securities was CHF 0.7 billion.

The cash flow used for financing activities was CHF 6.6 billion. CHF 5.1 billion were spent for the acquisition of treasury shares and CHF 2.3 billion for dividend payments while the issue of a EUR 1 billion bond and the conversions of the remaining two convertible bonds contributed to a net inflow of CHF 0.8 billion.

Overall liquidity (cash, cash equivalents and marketable securities including financial derivatives) amounted to CHF 17.6 billion at December 31, 2002, a reduction of CHF 4.6 billion over the previous year-end balance. Net liquidity (liquidity less financial debt) remains high at CHF 9.8 billion despite a reduction of CHF 3.7 billion from the December 31, 2001 level due to the various financing activities explained above.

Group free cash flow

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

	2002 CHF millions	2001 CHF millions
Cash flow from operating activities	**8 162**	**7 342**
Purchase of tangible fixed assets	-1 661	-1 351
Purchase of intangible and financial assets	-4 137	-7 552
Sale of tangible, intangible and financial assets	1 525	1 825
Dividends paid to third parties	-2 294	-2 194
Acquisition of product and marketing rights		826
Acquisition of voting shares of Roche Holding AG	2 868	5 177
Free cash flow (excluding acquisitions of the Roche stake and product and marketing rights)	**4 463**	**4 073**

The free cash flow, excluding the impact of the acquisitions of the Roche stake, Lek and marketing and product rights, increased 9.6% from CHF 4.1 billion in 2001 to CHF 4.5 billion in 2002.

Group capital expenditure on tangible fixed assets for the 2002 financial year totaled 1.7 billion (5.1% of sales), compared to a comparable figure CHF 1.4 billion (4.3% of sales) in 2001. This level of capital expenditure reflects the continuing investment in production and research and development facilities. The Group intends to maintain spending at 2002 levels in 2003 and to fund these expenditures with internally generated resources.

Free cash flow of the divisions and business units uses the same definition as that for the Group, however no dividends, tax or financial receipts or payments are included in the division and business unit calculation.

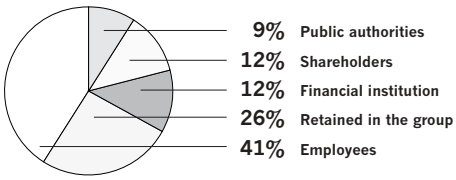
Free cash flow

	2002 CHF millions	2001 CHF millions
Pharmaceuticals (before acquisition of product and marketing rights)	6 919	6 663
Generics	389	46
OTC	256	393
Animal Health	151	195
Medical Nutrition[1]	116	77
Infant & Baby	223	170
CIBA Vision	219	59
Corporate and other (before acquisition of the voting shares of Roche Holding AG)	-3 810	-3 530
Total	**4 463**	**4 073**

[1] Including Nutrition & Santé and divested activities.

The following summarizes the Group's contractual obligations and other commercial commitments, and the effect such obligations and commitments are expected to have on the Group's liquidity and cash flow in future periods.

Distribution of net value added



	Payment due by period				
	Total CHF millions	Less than 1 year CHF millions	2-3 years CHF millions	4-5 years CHF millions	After 5 years CHF millions
Long-term debt	3 987	156	912	2 874	45
Operating leases	1 313	259	355	207	492
Research & development commitments	941	368	357	136	80
Total contractual cash obligations	**6 241**	**783**	**1 624**	**3 217**	**617**

The Group expects to fund the operating leases and long-term research & development commitments with internally generated resources.

Special purpose entities

The Novartis Group has no unconsolidated special purpose financing or partnership entities. See also note 27 of the consolidated financial statements.

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 charge.

	2002 CHF millions	2001 CHF millions
Operating income	**7 887**	**7 277**
Depreciation on tangible fixed assets	921	939
Amortization on intangible assets	551	564
Impairments of tangible and intangible assets	540	246
Group EBITDA	**9 899**	**9 026**

The breakdown of the Group EBITDA into divisions/business units is as follows:

	EBITDA 2002 CHF millions	% of sales	EBITDA 2001 CHF millions	% of sales
Pharmaceuticals	7 288	34.7	6 803	33.7
Generics	634	22.6	494	20.3
OTC	425	18.0	505	19.9
Animal Health	182	18.7	167	17.4
Medical Nutrition[1]	291	20.3	120	7.9
Infant & Baby	473	22.8	449	20.2
CIBA Vision	378	21.5	372	20.8
Total divisions/business units	**9 671**	**29.8**	**8 910**	**28.2**
Corporate and other	228		116	
Total Group	**9 899**	**30.5**	**9 026**	**28.5**

[1] Including Nutrition & Santé and divested activities.

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.

	2002 CHF millions	2001 CHF millions
Market capitalization	124 862	152 891
Minority interests	92	104
Financial debts	7 819	8 677
Less liquidity	-17 605	-22 152
Year end Enterprise value	**115 168**	**139 520**
Enterprise value/EBITDA	**11.6**	**15.5**

Value Added Statement

44.3% of the revenue from sales was used for purchasing goods and services from our suppliers. 24.3% of sales was paid either directly or indirectly to the employees and 15.5% of sales was retained in the business for future expansion. Dividends paid to shareholders represented 7.1% of sales.

Origin of value added	2002 CHF millions	2002 % of sales	2001 % of sales
Sales	**32 412**	**100.0**	**100.0**
Change in inventory and own manufactured items	47		
	32 459	**100.0**	**100.0**
Services bought from third parties:			
Material costs	-5 774	-17.8	-19.9
Other operating expenses	-8 618	-26.5	-27.3
Gross value added	**18 067**	**55.7**	**52.8**
Depreciation, amortization and impairments on tangible and intangible assets	-2 012	-6.2	-5.5
Financial income	3 332	10.3	10.6
Net value added (NVA)	**19 387**	**59.8**	**57.9**

Equity strategy and share information

Novartis shares outperformed SMI

In 2002 the equity capital market came under enormous pressure and the Swiss Market Index (SMI) decreased 28% and the Morgan Stanley World Pharmaceutical Index decreased 20% over the year. In this difficult market environment the Novartis share price declined 16% from CHF 60.00 at the beginning of the year to CHF 50.45 on December 31, 2002. The market capitalization of Novartis amounted to CHF 124.9 billion on December 31, 2002, compared to CHF 152.9 billion at the end of 2001.

Dividend continuously increased since 1996

The Board is proposing to the Annual General Meeting to increase the dividend payment for 2002 by 6% to CHF 0.95 per share (2001: CHF 0.90). This represents the sixth consecutive increase in the dividend per share since the formation of Novartis in late 1996. If the 2002 dividend proposal is approved by the shareholders, dividends paid out on the outstanding shares will amount to CHF 2.4 billion (2001: CHF 2.3 billion), resulting in a pay-out ratio of 33% (2001: 33%). Based on the 2002 year-end share price of CHF 50.45, Novartis' dividend yield is 1.9% (2001: 1.5%). The dividend payment date for 2002 will be on March 7, 2003. With the exception of 277.1 million treasury shares, all issued shares are dividend bearing.

Third share repurchase program initiated

On July 22, 2002, Novartis initiated its third share buy-back program to repurchase shares on the SWX Swiss Exchange for up to a total of CHF 4 billion. During 2002, 24.6 million shares were repurchased via a second trading line for a total amount of CHF 1.5 billion. As with the Group's first use of the second trading line the Board will propose reducing the Group's share capital by 22.7 million shares corresponding to the shares repurchased but not yet cancelled at the forthcoming Annual General Meeting in March 2003. During the year to December 31, 2002, an additional 55.4 million shares, net were also repurchased on the first trading line for a total of CHF 3.6 billion.

US dollar reporting

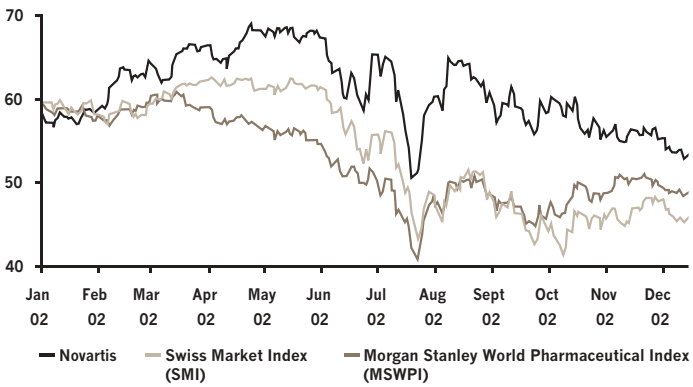
The Group intends to change the reporting currency of its consolidated financial statements from Swiss francs to US dollars from January 1, 2003. The 2002 consolidated financial information will be restated into US dollars with this restatement being available prior to the release of the first quarter 2003 financial data.

The move to presenting the consolidated financial data in US dollars reflects the increasing importance of the Novartis Group's sales in US dollars and will make the financial information more easily comparable with peer companies in the pharmaceutical industry.

Information on Novartis shares

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

Chart of Novartis 2002 share price movement



Key Novartis share data[1]

	2002	2001
Issued shares	**2 824 150 000**	**2 885 204 680**
Of which treasury shares		
Reserved to secure conversion rights		
on bonds and call options	54 901 962	59 405 716
Not specifically reserved	294 277 419	277 618 704
Treasury shares	**349 179 381**	**337 024 420**
Outstanding shares at December 31	**2 474 970 619**	**2 548 180 260**
Average number of shares outstanding	**2 515 311 685**	**2 571 673 365**

Per share information[1] (CHF)

	2002	2001
Basic earnings per share	2.91	2.73
Diluted earnings per share	2.84	2.72
Operating cash flow	3.24	2.85
Year end equity	16.03	16.58
Dividend[2]	0.95	0.90

Key ratios – December 31

	2002	2001
Price/earnings ratio	17.3	22.0
Enterprise value/EBITDA	11.6	15.5
Dividend yield (%)	1.9	1.5

Key data on US American Depositary Receipts (ADR) program

	2002	2001
Year-end ADS price (USD)	36.73	36.50
ADSs outstanding[3]	93 388 802	101 028 511

[1] Calculated on average number of shares outstanding except year end equity.
[2] 2002: Proposal to shareholders' meeting.
[3] The depositary, JP Morgan Chase Bank, holds one Novartis AG share for every American Depositary Share (ADS) issued.

Share price (CHF)

	2002	2001
Year-end	50.45	60.00
Highest	69.10	74.15
Lowest	49.20	54.95
Year-end market capitalization (CHF millions)	**124 862**	**152 891**

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, 2002, Novartis had approximately 167 000 shareholders (2001: 165 000) registered in its share register. 77% of the shares recorded in the share register are held by Swiss nationals (2001: 78%). Based on its share register Novartis believes that approximately 12% of its shares are held by approximately 1 100 registered holders in the USA (2001: 11% and 1 800 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, 2002	% holding of share cpaital December 31, 2001
Emasan AG, Basel	3.1	3.8
Novartis Foundation for Employee Participation, Basel	3.3	3.5

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 value of transactions executed in currencies other than the subsidiary's currency may vary according to currency fluctuations.

Quantitative and qualitative disclosures about market risk

	Local currencies % 2002	Local currencies % 2001	CHF % 2002	CHF % 2001
Growth and currency contributions				
Sales	11	14	2	10
Operating income	10	9	8	8
Net income	4	8	4	8

	Sales % 2002	Sales % 2001	Costs % 2002	Costs % 2001
Sales and operating costs by currencies				
USD	43	45	32	31
EUR	25	23	25	22
CHF	5	5	21	26
JPY	8	8	6	5
Other	19	19	16	16

	Liquid funds % 2002	Liquid funds % 2001	Financial debt % 2002	Financial debt % 2001
Liquid funds and financial debt by currencies				
USD	8	8	31	46
EUR	24	35	6	4
CHF	64	55	37	21
JPY	1		20	24
Other	3	2	6	5

On average in 2002, the Swiss franc was stronger against the US dollar, Japanese yen, Euro and British pound than in 2001. The total negative currency effect on sales growth was 9% and the total negative impact on operating income growth was 2%.

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 as in 2000. The total negative currency effect on sales growth was 4% and the total negative impact on operating income growth was 1%.

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 for 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 futures, 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 owned, 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, 2002 and 2001 or its results of operations for the years ended December 31, 2002 and 2001.

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, 2002 CHF millions	Dec 31, 2001 CHF millions
Instruments sensitive to foreign		
currency rates	180	226
Instruments sensitive to equity		
market movements	591	224
Instruments sensitive to interest rates	132	64
All instruments	714	324

The average, high, and low VAR amounts for 2002 are as follows:

	Average CHF millions	High CHF millions	Low CHF milllions
Instruments sensitive to foreign			
currency rates	178	281	120
Instruments sensitive to equity			
market movements	428	826	228
Instruments sensitive to interest rates	179	228	129
All instruments	580	999	403

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 2002 and 2001, the worst case loss scenario was configured as follows:

	Dec 31, 2002 CHF millions	Dec 31, 2001 CHF millions
Bond portfolio	1 167	895
Money market and linked financial instruments	148	457
Equities	1 077	817
Foreign exchange risks	475	151
Total	**2 867**	**2 320**

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.

Summary of Financial Data 1997 – 2002 (since formation of Novartis)

CHF millions unless indicated otherwise		2002	2001	2000	1999	1998	1997
Novartis Group sales		**32 412**[1]	**31 643**[1]	**35 395**[1]	**32 282**[1]	**31 702**	**31 180**
Change relative to preceding year	%	2.4	-10.6	9.6	1.8	1.7	-13.9
Pharmaceuticals Division sales		21 002	20 181	18 150	15 275	14 501	14 112
Change relative to preceding year	%	4.1	11.2	18.8	5.3	2.8	21.5
Consumer Health Division sales		11 410[1]	11 462[1]	10 551[1]	9 951[1]	9 723	9 634
Change relative to preceding year	%	-0.4	8.6	6.0	2.3	0.9	4.7
Discontinued Agribusiness & Industry Division sales				6 693	7 056	7 478	7 434
Operating income		**7 887**	**7 277**	**7 883**	**7 343**	**6 920**	**6 688**
Change relative to preceding year	%	8.4	-7.7	7.4	6.1	3.5	15.7
As a % of sales	%	24.3	23.0	22.3	22.7	21.8	21.4
As a % of average equity	%	19.3	18.4	21.3	21.4	23.8	24.6
As a % of average net operating assets	%	26.8	28.3	33.4	32.2	34.3	32.2
Net income		**7 313**	**7 024**	**7 210**	**6 659**	**6 010**	**5 208**
Change relative to preceding year	%	4.1	-2.6	8.3	10.8	15.4	126.0
As a % of sales	%	22.6	22.2	20.4	20.6	19.0	16.7
As a % of average equity	%	17.9	17.8	19.5	19.4	20.7	20.7
Dividends of Novartis AG[2]		**2 420**	**2 358**	**2 361**	**2 223**	**2 014**	**1 736**
Cash flow from operating activities		**8 162**	**7 342**	**7 612**	**6 893**	**5 853**	**4 565**
Change relative to preceding year	%	11.2	-3.5	10.4	17.8	28.2	-3.7
As a % of sales	%	25.2	23.2	21.5	21.4	18.5	14.6
Free cash flow		**4 463**	**4 073**	**4 525**	**3 525**	**2 623**	**1 224**
Change relative to preceding year	%	9.6	-10.0	28.4	34.4	114.3	-11.0
As a % of sales	%	13.8	12.9	12.8	10.9	8.3	3.9
Investment in tangible fixed assets		**1 661**	**1 351**	**1 353**	**1 371**	**1 577**	**1 568**
Change relative to preceding year	%	22.9	-0.1	-1.3	-13.1	0.6	-16.5
As a % of sales	%	5.1	4.3	3.8	4.2	5.0	5.0
Depreciation of tangible fixed assets		**921**	**939**	**1 189**	**1 261**	**1 161**	**1 140**
As a % of sales	%	2.8	3.0	3.4	3.9	3.7	3.7
Research & development expenditure		**4 339**	**4 189**	**4 657**	**4 246**	**3 906**	**3 739**
As a % of sales	%	13.4	13.2	13.2	13.2	12.3	12.0
Pharmaceuticals research & development expenditure		**3 580**	**3 447**	**3 311**	**2 848**	**2 609**	**2 629**
As a % of Pharmaceuticals Division sales	%	17.0	17.1	18.2	18.6	18.0	18.6
Total assets		**63 202**	**66 761**	**58 196**	**65 527**	**56 225**	**53 650**
Liquidity		17 605	22 152	20 523	22 601	19 678	18 486
Equity		39 682	42 245	36 862	37 216	31 396	26 801
Debt/equity ratio		0.20:1	0.21:1	0.16:1	0.27:1	0.28:1	0.41:1
Current ratio		2.5:1	2.4:1	2.8:1	2.0:1	2.0:1	2.0:1
Net operating assets		**29 988**	**28 874**	**22 479**	**24 759**	**20 826**	**19 528**
Change relative to preceding year	%	3.9	28.4	-9.2	18.9	6.6	-10.5
As a % of sales	%	92.5	91.2	63.5	76.7	65.7	62.6
Personnel costs		**7 971**	**7 358**	**7 813**	**7 184**	**7 093**	**7 298**
As a % of sales	%	24.6	23.3	21.1	22.3	22.4	23.4
Number of employees at year end	number	**72 877**	**71 116**	**67 653**	**81 854**	**82 449**	**87 239**
Sales per employee	CHF	437 864	449 992	426 286	391 492	369 337	350 905

[1] Restated due to deduction from sales of certain sales incentives and discounts to retailers instead of inclusion in Marketing & Distribution expenses.
[2] 2002: Proposal to the shareholders' meeting

Novartis Group Consolidated Financial Statements

Consolidated Income Statements

for the years ended December 31, 2002 and 2001

	Notes	2002 CHF millions	2001 CHF millions
Sales	3/4	**32 412**	**31 643**[1]
Cost of goods		-7 618	-7 886
Gross profit		**24 794**	**23 757**
Marketing & distribution		-10 987	-10 703[1]
Research & development	3	-4 339	-4 189
Administration & general overheads		-1 581	-1 588
Operating income	3/4	**7 887**	**7 277**
Income from associated companies	10	-10	139
Financial income, net	5	949	1 067
Income before taxes and minority interests		**8 826**	**8 483**
Taxes	6	-1 490	-1 440
Income before minority interests		**7 336**	**7 043**
Minority interests		-23	-19
Net income		**7 313**	**7 024**
Earnings per share (CHF)	7	2.91	2.73
Diluted earnings per share (CHF)	7	2.84	2.72

[1] Restated to reflect a change in classification of certain sales incentives and discounts to retailers. 2001 Sales and marketing & distribution expenses have both been reduced by CHF 395 million.

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

Consolidated Balance Sheets

at December 31, 2002 and 2001

	Notes	2002 CHF millions	2001 CHF millions
Assets			
Long-term assets			
Tangible fixed assets	8	8 873	9 060
Intangible assets	9	6 170	6 548
Investments in associated companies	10	9 100	6 715
Deferred taxes	11	3 057	3 235
Other financial assets	12	6 784	7 027
Total long-term assets		**33 984**	**32 585**
Current assets			
Inventories	13	4 159	4 112
Trade accounts receivable	14	5 190	5 349
Other current assets	15	2 264	2 563[1]
Marketable securities & financial derivatives	16	9 467	11 005[1]
Cash and cash equivalents		8 138	11 147
Total current assets		**29 218**	**34 176**
Total assets		**63 202**	**66 761**
Equity and liabilities			
Equity			
Share capital	17	1 412	1 443
Treasury shares	17	-175	-169
Reserves		38 445	40 971
Total equity		**39 682**	**42 245**
Minority interests		**92**	**104**
Liabilities			
Long-term liabilities			
Financial debts	18	3 831	2 500
Deferred taxes	11	3 959	3 885
Provisions and other long-term liabilities	19	4 026	3 830
Total long-term liabilities		**11 816**	**10 215**
Short-term liabilities			
Trade accounts payable		1 778	1 809
Financial debts	20	3 988	6 177[1]
Other short-term liabilities	21	5 846	6 211[1]
Total short-term liabilities		**11 612**	**14 197**
Total liabilities		**23 428**	**24 412**
Total equity and liabilities		**63 202**	**66 761**

[1] Restated due to reclassification of the fair value of derivative financial instruments from other current assets to marketable securities & financial derivatives and from other short-term liablilities to short-term financial debts.

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

Consolidated Cash Flow Statements

for the years ended December 31, 2002 and 2001

	Notes	2002 CHF millions	2001 CHF millions
Net income		**7 313**	**7 024**
Reversal of non-cash items			
Minority interests		23	19
Taxes		1 490	1 440
Depreciation, amortization and impairments on			
Tangible fixed assets		966	969
Intangible assets		1 046	780
Financial assets		64	31
Income from associated companies		10	-139
Divestment gains		-206	-45
Gains on disposal of tangible and intangible assets		-405	-465
Net financial income		-949	-1 067
Dividends received		36	42
Interest and other financial receipts		676	737
Interest and other financial payments		-271	-391
Receipts from associated companies		55	
Taxes paid		-1 196	-1 377
Cash flow before working capital and provision changes		**8 652**	**7 558**
Restructuring payments and other cash payments out of provisions		-317	-421
Change in net current assets and other operating cash flow items	22	-173	205
Cash flow from operating activities		**8 162**	**7 342**
Investment in tangible fixed assets		-1 661	-1 351
Proceeds from disposals of tangible fixed assets		286	275
Purchase of intangible assets		-139	-978
Purchase of financial assets		-3 998	-6 574
Proceeds from disposals of intangible and financial assets		1 239	1 550
Acquisition/divestment of subsidiaries	23	-847	-169
Acquisition of minorities		-3	-1
Proceeds from disposals of marketable securities		11 004	8 196
Payments for acquiring marketable securities		-10 336	-5 623
Cash flow used for investing activities		**-4 455**	**-4 675**
Acquisition of treasury shares		-5 147	-3 848
Proceeds from issue of options on Novartis shares			4 056
Increase in long-term financial debts		1 551	1 384
Repayment of long-term financial debts		-28	-126
Change in short-term financial debts		-699	374
Dividends paid		-2 294	-2 194
Cash flow used for financing activities		**-6 617**	**-354**
Net effect of currency translation on cash and cash equivalents		-99	31
Net change in cash and cash equivalents		**-3 009**	**2 344**
Cash and cash equivalents at the beginning of the year		**11 147**	**8 803**
Cash and cash equivalents at end of the year		**8 138**	**11 147**

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

Consolidated Statement of Changes in Equity

for the years ended December 31, 2002 and 2001

	Notes	Share premium CHF millions	Retained earnings CHF millions	Fair value adjustments on marketable securities not recorded in net income CHF millions	Fair value of deferred cash flow hedges not recorded in net income CHF millions	Cumulative translation differences not recorded in net income CHF millions	Total reserves CHF millions	Share capital CHF millions	Treasury shares CHF millions	Total equity CHF millions
January 1, 2001		**289**	**35 976**	**1 943**	**103**	**-707**	**37 604**	**1 443**	**-139**	**38 908**
Fair value adjustments on financial instruments	24a			-889	-123		-1 012			-1 012
Associated companies' equity movements	24b		-7				-7			-7
Translation effects	24c					-637	-637			-637
Net income			7 024				7 024			7 024
Total of components of comprehensive income			**7 017**	**-889**	**-123**	**-637**	**5 368**			**5 368**
Dividends	24d		-2 194				-2 194			-2 194
Acquisition of treasury shares	24e		-3 818				-3 818		-30	-3 848
Issue of call options on Novartis shares	24f	3 102					3 102			3 102
Issue of put options on Novartis shares	24g	909					909			909
Total of other equity movements		**4 011**	**-6 012**				**-2 001**		**-30**	**-2 031**
December 31, 2001		**4 300**	**36 981**	**1 054**	**-20**	**-1 344**	**40 971**	**1 443**	**-169**	**42 245**
Fair value adjustments on financial instruments	24a		138	-1 467	201		-1 128			-1 128
Associated companies' equity movements	24b		-111			-35	-146			-146
Recycled goodwill	24h		41				41			41
Translation effects						-1 501	-1 501			-1 501
Net income			7 313				7 313			7 313
Total of components of comprehensive income			**7 381**	**-1 467**	**201**	**-1 536**	**4 579**			**4 579**
Dividends	24d		-2 294				-2 294			-2 294
Acquisition of treasury shares	24e		-4 811				-4 811		-37	-4 848
Reduction in share capital	24i							-31	31	
Total of other equity movements			**-7 105**				**-7 105**	**-31**	**-6**	**-7 142**
December 31, 2002		**4 300**	**37 257**	**-413**	**181**	**-2 880**	**38 445**	**1 412**	**-175**	**39 682**

The accompanying notes form an integral part of the 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 with 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.

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 with the Group recording its share of the associated company's net income and equity.

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 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, the merger 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 when the significant risks and rewards of ownership of the assets have been transferred to a third party 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. Sales have been restated for all periods presented to treat certain sales incentives and discounts to retailers as sales deductions instead of marketing and distribution expenses.

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.

In the respective entity financial statements, monetary assets and liabilities denominated in foreign currencies are translated at the rate prevailing at the balance sheet date. Transactions are recorded using the approximate exchange rate at the time of the transaction. All resulting foreign exchange transaction gains and losses are recognized in the 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: Derivative financial instruments are initially 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 derivatives which qualify as hedges for accounting purposes as either a) a hedge of the fair value of a recognized asset or liability (fair value hedge), or b) a hedge of a forecasted transaction or firm

commitment (cash flow hedge) or c) a hedge of a net investment in a foreign entity.

Changes in the fair value of derivatives which are fair value hedges and that are highly effective are recognized in the income statement, along with any changes in the fair value of the hedged asset or liability that is attributable to the hedged risk. 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 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.

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 over the shorter of the lease term or their useful life.

Long-lived assets, including identifiable intangibles and goodwill, are reviewed for impairment whenever events or changes in circumstance indicate that the balance sheet 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 its value in use based on the future cash flows expected to result from the use of the asset and its eventual disposition. If the balance sheet carrying amount of the asset is more than the higher of its value in use to Novartis or its net selling price, an impairment loss for the difference is recognized. For purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows. Considerable management judgment is necessary to estimate discounted future cash flows. Accordingly, actual outcomes could vary significantly from such estimates.

1. Accounting policies (continued)

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 company at the time of the acquisition, considering factors such as existing market share, potential sales growth and other factors inherent in the acquired company.

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 first generate sales.

Financial assets: Associated companies and joint ventures are accounted for by the equity method. 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.

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. Unsaleable 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. The Group has classified all its marketable securities as available-for-sale, as they are not acquired to generate profit from short-term fluctuations in price. All purchases and sales of marketable securities are recognized on the trade date, which is the date that the Group commits to purchase or sell the asset. Marketable securities are initially recorded at 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 are included in financial income, net in the income statement when there is objective evidence that the marketable securities are impaired. The Group's policy is to recognize impairments on available-for-sale securities when their fair value is 50% less than cost for a sustained period of 6 months.

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 plans, 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 employees' 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 plan

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: Treasury shares are deducted from equity at their nominal value of CHF 0.50 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of, treasury shares are recorded in consolidated equity.

2. Changes in the scope of consolidation

The following significant changes were made during 2002 and 2001:

Acquisitions 2002

Generics: On November 29, 2002 the business unit acquired 99% of Lek d.d., Ljubljana, Slovenia for CHF 1.3 billion in cash. Lek is an international group of generics companies and ranks among the leading pharmaceuticals businesses in the Eastern European region, while having a broader international presence in several specific product lines. Lek manages a wide-ranging business portfolio, with substantial expertise in anti-infectives, cardiovascular and gastrointestinal tract products. The Lek Group employs about 3 900 people in various regions and achieved total sales of CHF 544 million, operating income of CHF 67 million and net income of CHF 57 million in 2001. The acquisition was accounted for under the purchase method of accounting. A provisional balance sheet at December 31, 2002 has been consolidated, however, due to its immateriality, no post-acquisition income statement or cash flow has been consolidated. The balance sheet may be subject to revision once the final accounting for this transaction has been determined during 2003. An initial assessment of goodwill was CHF 795 million which is being amortized on a straight-line basis over 20 years.

Animal Health: In January 2002, the business unit completed the acquisition of two US farm animal vaccine companies, Grand Laboratories Inc., Iowa and ImmTech Biologies Inc., Kansas. The combined 2001 revenues were approximately CHF 55 million and the combined purchase price is a minimum of CHF 168 million of which CHF 133 million was settled in Novartis American Depositary Shares. The final price may increase depending on whether certain future sales and other targets are met. The acquisition was accounted for under the purchase method of accounting and the related goodwill was CHF 142 million which is being amortized on a straight-line basis over 15 years.

Corporate: During 2002 the Group increased its investment in Roche Holding AG by CHF 2.9 billion by acquiring a further 11.4% of this company's voting shares. At December 31, 2002, Novartis owns 32.7% of the voting shares which represents approximately 6.2% of Roche Holding AG's total shares and equity securities.

Divestments 2002

Consumer Health Division: On November 29, 2002 the division divested its Food & Beverage (F&B) business to Associated British Foods plc (ABF), London, Great Britain, for a total of CHF 402 million in cash. ABF acquired the F&B business and brand ownership worldwide (including the brands Ovaltine/ Ovomaltine, Caotina and Lacovo) with the exception of the USA and Puerto Rico. The 2002 sales and operating income recorded by Novartis up to the November 29, 2002 divestment date amounted to CHF 325 million and CHF 11 million, respectively. This transaction produced a divestment gain of CHF 205 million which was recorded as a reduction to administration and general overheads.

Acquisitions 2001

Generics: In January, 2001, the business unit acquired 100% of 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 business unit acquired 100% of 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 business unit 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 business unit 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 2001, the Group acquired 21.3% of the voting shares of Roche Holding AG for CHF 5.2 billion. This represents approximately 4.0% of the total shares and equity securities of Roche Holding AG and is accounted for using the equity method of accounting.

3. Division and business unit breakdown of key figures 2002 and 2001

Operating Divisions: Novartis is divided operationally on a worldwide basis into two divisions, Pharmaceuticals and Consumer Health. These divisions, which are based on internal management structures, are as follows:

The Pharmaceuticals division researches, develops, 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 and transplantation. The Pharmaceuticals division is organized into five business units: Primary Care, Oncology, Transplantation, Mature Products and Ophthalmics, which due to the fact that they have common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments are not required to be separately disclosed as segments.

The Consumer Health division consists of the following six business units:

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

The Over-The-Counter (OTC) business unit manufactures, distributes and sells a variety of over-the-counter medicines.

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

The Medical Nutrition business unit manufactures, distributes and sells health and medical nutrition products.

The Infant & Baby business unit manufactures, distributes and sells foods and other products and services designed to serve the particular needs of infants and babies.

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

The current business unit structure of the Consumer Health division was introduced during 2002 to reflect management and organizational changes. 2001 figures and presentation have been restated.

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 divisions. Usually, no allocation of Corporate items is made to the divisions although there are charges made by Corporate for share and share option programs and certain pension plans.

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

Revenues on inter-divisional and inter-business unit sales are determined on an arm's length basis. The accounting policies of the divisions and business units described above are the same as those described in the summary of accounting policies except that they 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 divisional and business unit performance and allocates resources based on operating income.

Division and business unit net 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.

3. Division and business unit breakdown of key figures 2002 and 2001 (continued)

(in CHF millions except employees)	Pharma-ceuticals Division		Consumer Health Division		Generics		OTC		Animal Health		Medical Nutrition (incl. Nutrition & Santé)	
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
Sales to third parties	**21 002**	**20 181**	**11 410**	**11 462**	**2 809**	**2 433**	**2 359**	**2 538**	**971**	**962**	**1 109**	**1 115**
Sales to other divisions/business units	173	230	160	174	202	203	19	24		15	13	5
Sales of divisions/business units	**21 175**	**20 411**	**11 570**	**11 636**	**3 011**	**2 636**	**2 378**	**2 562**	**971**	**977**	**1 122**	**1 120**
Operating income	**6 022**	**5 677**	**1 684**	**1 513**	**406**	**281**	**374**	**452**	**144**	**138**	**6**	**87**
Income from associated companies	168	190	2	-12	2	2						-14
Financial income, net												
Income before taxes and minority interests												
Taxes												
Income before minority interests												
Minority interests												
Net income												
Included in operating income are:												
Research & development	-3 580	-3 447	-587	-541	-215	-169	-104	-104	-94	-93	-25	-33
Depreciation of tangible fixed assets	-546	-578	-346	-341	-129	-126	-32	-33	-13	-14	-32	-31
Amortization of intangible assets	-286	-306	-256	-249	-78	-87	-18	-18	-25	-15	-9	-8
Impairment charges on tangible and intangible assets	-434	-242	-97	-4	-21		-1	-2				-1
Restructuring charges			-84	-21			-14				-40	-21
Divestment gain	1		205									
Total assets	**16 763**	**18 631**	**11 818**	**11 662**	**4 673**	**3 362**	**1 266**	**1 386**	**846**	**735**	**541**	**612**
Liabilities	-5 476	-5 487	-3 685	-3 630	-1 097	-740	-465	-518	-195	-163	-342	-204
Total equity and minority interests	**11 287**	**13 144**	**8 133**	**8 032**	**3 576**	**2 622**	**801**	**868**	**651**	**572**	**199**	**408**
Less net liquidity												
Net operating assets	**11 287**	**13 144**	**8 133**	**8 032**	**3 576**	**2 622**	**801**	**868**	**651**	**572**	**199**	**408**
Included in total assets are:												
Total tangible fixed assets	5 593	5 897	2 634	2 626	1 389	1 081	237	264	100	73	131	141
Additions to tangible fixed assets	785	617	561	510	332	209	37	22	16	19	45	17
Additions to intangible assets	3	177	1 039	494	831	420	39	7	162	2		5
Total investments in associated companies	1 404	1 554	25	7	25	7						
Employees at year end	**44 110**	**41 256**	**27 552**	**28 848**	**7 932**	**7 230**	**3 797**	**3 613**	**2 218**	**1 997**	**2 701**	**2 910**

Consumer Health Division business units												
Infant & Baby		CIBA Vision		Divested Health & Functional Food activities		Consumer Health Division eliminations		Corporate		TOTAL	
2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
2 075	**2 227**	**1 762**	**1 787**	**325**	**400**					**32 412**	**31 643**
		13	17			-87	-90	-333	-404		
2 075	**2 227**	**1 775**	**1 804**	**325**	**400**	**-87**	**-90**	**-333**	**-404**	**32 412**	**31 643**
355	**388**	**183**	**174**	**216**	**-7**			**181**	**87**	**7 887**	**7 277**
								-180	-39	-10	139
										949	1 067
										8 826	**8 483**
										-1 490	-1 440
										7 336	**7 043**
										-23	-19
										7 313	**7 024**
-36	-40	-109	-98	-4	-4			-172	-201	-4 339	-4 189
-38	-41	-102	-96					-29	-20	-921	-939
-39	-19	-87	-102					-9	-9	-551	-564
-41	-1	-6		-28				-9		-540	-246
				-30						-84	-21
				205					45	206	45
2 274	**2 483**	**2 283**	**2 909**		**205**	**-65**	**-30**	**34 621**	**36 468**	**63 202**	66 761
-1 222	-1 342	-429	-599		-94	65	30	-14 267	-15 295	-23 428	-24 412
1 052	**1 141**	**1 854**	**2 310**		**111**			**20 354**	**21 173**	**39 774**	42 349
								-9 786	-13 475	-9 786	-13 475
1 052	**1 141**	**1 854**	**2 310**		**111**			**10 568**	**7 698**	**29 988**	**28 874**
327	386	450	579		102			646	537	8 873	9 060
68	84	63	153		6			315	224	1 661	1 351
	21	7	39					29	25	1 071	696
								7 671	5 154	9 100	6 715
4 901	**5 261**	**6 003**	**6 797**		**1 040**			**1 215**	**1 012**	**72 877**	**71 116**

4. Regional breakdown of key figures 2002 and 2001

(in CHF millions except employees)

	Europe	The Americas	Asia/Africa Australia	Total
2002				
Sales[1]	**10 602**	**16 407**	**5 403**	**32 412**
Operating income[2]	**5 927**	**1 483**	**477**	**7 887**
Depreciation of tangible fixed assets included in operating income	553	308	60	921
Net operating assets[3]	**19 776**	**8 858**	**1 354**	**29 988**
Additions to tangible fixed assets included in net operating assets	774	836	51	1 661
Additions to intangible assets	862	212	20	1 094
Personnel costs	3 544	3 744	683	7 971
Employees at year end	**32 595**	**28 328**	**11 954**	**72 877**

	Europe	The Americas	Asia/Africa Australia	Total
2001				
Sales[1]	**10 107**	**16 303**	**5 233**	**31 643**
Operating income[2]	**4 473**	**2 240**	**564**	**7 277**
Depreciation of tangible fixed assets included in operating income	561	311	67	939
Net operating assets[3]	**17 071**	**10 216**	**1 587**	**28 874**
Additions to tangible fixed assets included in net operating assets	560	723	68	1 351
Additions to intangible assets	241	442	13	696
Personnel costs	3 127	3 527	704	7 358
Employees at year end	**31 386**	**27 303**	**12 427**	**71 116**

The following countries accounted for more than 5% of the respective Group totals as at, or for the years ended, December 31, 2002 and 2001:

	Sales[1]				Investment in tangible fixed assets				Net operating assets[3]			
Country	2002	%	2001	%	2002	%	2001	%	2002	%	2001	%
Switzerland	492	2	499	2	193	12	160	12	12 967	43	10 548	37
USA	13 833	43	13 486	43	794	48	655	49	8 501	28	9 228	32
Japan	2 631	8	2 560	8	8	0	14	1	866	3	990	3
Germany	1 905	6	1 977	6	70	4	54	4	243	1	196	1
France	1 705	5	1 596	5	28	2	79	6	903	3	928	3
UK	1 055	3	1 054	3	123	7	60	4	1 211	4	1 415	5
Austria	278	1	267	1	203	12	107	8	861	3	805	3
Other	10 513	32	10 204	32	242	15	222	16	4 436	15	4 764	16
Total Group	**32 412**	**100**	**31 643**	**100**	**1 661**	**100**	**1 351**	**100**	**29 988**	**100**	**28 874**	**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 time deposits) less non-interest bearing liabilities.

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

5. Financial income, net

	2002 CHF millions	2001 CHF millions
Interest income	647	639
Dividend income	106	42
Capital gains		1 143
Income on options and forward contracts	2 575	1 588
Other financial income	4	
Financial income	**3 332**	**3 412**
Interest expense	-301	-367
Capital losses	-123	
Expenses on options and forward contracts	-1 958	-1 713
Other financial expense	-107	-147
Financial expense	**-2 489**	**-2 227**
Currency result, net	**106**	**-118**
Total financial income, net	**949**	**1 067**

2002 interest income includes a total of CHF 30 million (2001: CHF 32 million) received from the foundations referred to in note 27, at commercial interest rates on the outstanding short-term debt.

6. Taxes

Income before taxes and minority interests consists of the following:

	2002 CHF millions	2001 CHF millions
Switzerland	3 871	3 372
Foreign	4 955	5 111
Total income before taxes and minority interests	**8 826**	**8 483**

Current and deferred income tax expense consists of the following:

	2002 CHF millions	2001 CHF millions
Switzerland	-424	-271
Foreign	-740	-1 005
Total current income tax expense	**-1 164**	**-1 276**
Switzerland	-71	-281
Foreign	-236	175
Total deferred tax expense	**-307**	**-106**
Share of tax of associated companies	**-19**	**-58**
Total income tax expense	**-1 490**	**-1 440**

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

	2002 CHF millions	2001 CHF millions
one year	43	30
two years	11	26
three years	17	75
four years	19	36
five years	277	35
more than five years	749	565
Total	**1 116**	**767**

Of these gross values CHF 429 million has been capitalized as a deferred tax asset (2001: CHF 535 million).

CHF 3 million of operating tax loss carryforwards expired during 2002 (2001: CHF 2 million).

6. Taxes (continued)

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:

	2002 %	2001 %
Expected tax rate	15.6	17.7
Effect of disallowed expenditures	2.4	3.1
Effect of utilization of tax losses brought forward from prior periods	-0.5	-0.3
Effect of income taxed at reduced rates	-1.9	-1.6
Prior year and other items	1.3	-1.9
Effective tax rate	**16.9**	**17.0**

The utilization of tax loss carryforwards lowered the tax charge by CHF 41 million and CHF 22 million in 2002 and 2001, 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.

	2002	2001
Net income (CHF millions)	7 313	7 024
Weighted average number of shares outstanding	2 515 311 685	2 571 673 365
Basic earnings per share (CHF)	**2.91**	**2.73**

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.

Share equivalents of 16.2 million (2001: 12.2 million) were excluded from the calculation of diluted earnings per share as they were anti-dilutive.

	2002	2001
Net income (CHF millions)	7 313	7 024
Elimination of interest expense on convertible debt (net of tax effect)	3	3
Net income used to determine diluted earnings per share	7 316	7 027
Weighted average number of shares outstanding	2 515 311 685	2 571 673 365
Adjustment for assumed conversion of convertible debt		1 507 027
Call options on Novartis shares	54 891 036	4 574 401
Adjustment for dilutive share options	2 264 236	1 010 963
Weighted average number of shares for diluted earnings per share	2 572 466 957	2 578 765 756
Diluted earnings per share (CHF)	**2.84**	**2.72**

8. Tangible fixed asset movements

	Land CHF millions	Buildings CHF millions	Machinery CHF millions	Plant under construction and other equipment CHF millions	2002 CHF millions	2001 CHF millions
Cost						
January 1	**377**	**6 463**	**9 880**	**1 149**	**17 869**	**17 551**
Consolidation changes	21	118	318	23	480	-47
Additions	79	597	806	179	1 661	1 351
Disposals	-6	-303	-487	-10	-806	-789
Translation effects	-42	-468	-734	-175	-1 419	-197
December 31	**429**	**6 407**	**9 783**	**1 166**	**17 785**	**17 869**
Accumulated depreciation						
January 1	**-1**	**-3 093**	**-5 715**		**-8 809**	**-8 521**
Consolidation changes		-45	-288		-333	74
Depreciation charge		-205	-716		-921	-939
Depreciation on disposals		127	465		592	486
Impairment charge		-10	-35		-45	-30
Translation effects		169	435		604	121
December 31	**-1**	**-3 057**	**-5 854**		**-8 912**	**-8 809**
Net book value – December 31	**428**	**3 350**	**3 929**	**1 166**	**8 873**	**9 060**
Insured value – December 31					**21 529**	**21 060**
Net book value of tangible fixed assets under finance lease contracts					**212**	**13**

At December 31, 2002 commitments for purchases of tangible fixed assets totaled CHF 97 million (2001: CHF 261 million).

9. Intangible asset movements

	Goodwill CHF millions	Product and marketing rights CHF millions	Trademarks CHF millions	Software CHF millions	Other intangibles CHF millions	2002 CHF millions	2001 CHF millions
Cost							
January 1	**2 736**	**4 222**	**614**	**85**	**333**	**7 990**	**6 508**
Consolidation changes		1	-11	49	457	496	752
Additions	937	51	13	5	65	1 071	696
Disposals	-7	-6	-6	-6	-17	-42	-42
Translation effects	-399	-330	-95	-9	-58	-891	76
December 31	**3 267**	**3 938**	**515**	**124**	**780**	**8 624**	**7 990**
Accumulated amortization							
January 1	**-442**	**-577**	**-132**	**-62**	**-229**	**-1 442**	**-678**
Consolidation changes	-20	-50	-1	-42	-82	-195	-16
Amortization charge	-141	-286	-41	-16	-67	-551	-564
Disposals	3	2	6	6	26	43	45
Impairment charge	-369	-102	-18		-6	-495	-216
Translation effects	94	53	25	5	9	186	-13
December 31	**-875**	**-960**	**-161**	**-109**	**-349**	**-2 454**	**-1 442**
Net book value – December 31	**2 392**	**2 978**	**354**	**15**	**431**	**6 170**	**6 548**

The principal additions in both years were goodwill on acquisitions and in 2001 pitavastatin marketing rights.

In 2002, goodwill impairment charges were recorded of CHF 369 million mainly related to the Pharmaceuticals division research and biotechnology activities of Genetic Therapy Inc., Systemix Inc., Imutran Ltd., due to changes in the research and development strategy, and relating to the Medical Nutrition and OTC business units. The majority of the product and marketing rights impairment related to a CHF 80 million charge to the pitavastatin rights (2001: CHF 216 million)

10. Investments 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	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Roche Holding AG, Switzerland	7 667	5 150	-180	-39
Chiron Corporation, USA	1 398	1 544	167	185
Others	35	21	3	-7
Total	**9 100**	**6 715**	**-10**	**139**

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 ("Chiron"), 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 has been increased during 2002 from 21.3% to 32.7% of the voting shares of the company. This investment represents 6.2% of the total outstanding voting and non-voting equity instruments. In order to apply the equity method of accounting, 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 at the time of acquisition. The purchase price allocations for the investments in 2001 and 2002 were made on publicly available information at the time of acquisition of the shares. As a result of the proposed divestiture of Roche's Vitamins and Fine Chemicals division, the fair value allocation of Novartis' share of tangible and intangible assets has been revised in 2002 and is subject to further adjustments as more information becomes available.

The purchase price allocation is as follows:

	CHF millions
Identified intangible assets	4 630
Other net liabilities	-38
Residual goodwill	3 453
Total purchase price	**8 045**
Net income effect – 2002	-145
Other accumulated equity adjustments	-233
December 31, 2002 balance sheet value	**7 667**

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 income statement effect for 2002 and 2001 is as follows:

	2002 CHF millions	2001 CHF millions
Depreciation and amortizationof fair value adjustments to tangible and intangible assets and goodwill	-341	-213
Novartis share of estimated Roche consolidated pre-tax income	161	174
Pre-tax income statement effect	**-180**	**-39**
Deferred tax	35	12
Net income effect	**-145**	**-27**

The market value of Novartis' interest in Roche at December 31, 2002 was CHF 9.2 billion (Reuter symbol: ROCZ).

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 estimated Chiron equity at December 31 of each year. 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 185 million and CHF 217 million as of December 31, 2002 and 2001, 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 42.0% at December 31, 2002 and had a market value of CHF 4.2 billion (NASDAQ symbol: CHIR).

11. Deferred taxes

		2002 CHF millions	2001 CHF millions
Assets associated with	– employee benefit liabilities	395	440
	– net operating loss carryforwards	303	215
	– inventory	1 292	1 303
	– intangible assets	80	193
	– other provisions and accruals	1 190	1 181
Less: valuation allowance		-203	-97
Deferred tax assets less valuation allowance		**3 057**	**3 235**
Liabilities associated with	– tangible fixed asset depreciation	796	872
	– prepaid pensions	1 262	1 208
	– other provisions and accruals	1 614	1 526
	– inventories	287	279
Total liabilities		**3 959**	**3 885**
Net deferred tax liability		**902**	**650**

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 both December 31, 2002 and 2001, unremitted earnings of CHF 35 billion have been retained by subsidiary companies for reinvestment. No provision is made for income taxes that would be payable upon the distribution of such earnings. If the earnings were remitted, an immaterial income tax charge would result based on the tax statutes currently in effect.

	2002 CHF millions	2001 CHF millions
Temporary differences on which no deferred tax has been provided as they are permanent in nature:		
– write-down of investments in subsidiaries	2 012	1 635
– goodwill from acquisitions	1 276	1 230

12. Other financial assets

	2002 CHF millions	2001 CHF millions
Other investments and long-term loans	1 833	2 185
Prepaid pension	4 951	4 842
Total	**6 784**	**7 027**

Other investments are valued at market value.
During 2002, CHF 100 million (2001: CHF 20 million) of unrealized losses on investments were considered to be other than temporary and were charged to the income statement.

13. Inventories

	2002 CHF millions	2001 CHF millions
Raw material, consumables	699	772
Finished products	3 460	3 340
Total inventories	**4 159**	**4 112**

At December 31, 2002 and 2001, inventory write-downs of CHF 354 million and CHF 368 million respectively were deducted in arriving at the inventory values.

14. Trade accounts receivable

	2002 CHF millions	2001 CHF millions
Total	5 496	5 645
Provision for doubtful receivables	-306	-296
Total trade accounts receivable, net	**5 190**	**5 349**

15. Other current assets

		2002 CHF millions	2001 CHF millions
Withholding tax recoverable		210	294
Gerber Life insurance receivables		290	304
Prepaid expenses	– third parties	460	303
	– associated companies	2	8
Other receivables	– third party	1 292	1 639
	– associated companies	10	15
Total other current assets		**2 264**	**2 563**

16. 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, 2002 and 2001 or the Group's results of operations for the years ended December 31, 2002 and 2001.

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 mini-

mized 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, 2002 and 2001. 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, 2002 and 2001.

Derivative financial instruments	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Currency related instruments						
Forward foreign exchange rate contracts	8 680	4 724	304	32	-240	-214
Over the counter currency options	9 210	12 315	39	39	-182	-149
Cross currency swaps	2 770	1 332	42			-33
Total of currency related instruments	**20 660**	**18 371**	**385**	**71**	**-422**	**-396**
Interest rate related instruments						
Interest rate swaps	4 192	3 700	69	29	-1	-5
Forward rate agreements	3 850	6 450			-10	-17
Interest rate options	950	150	2		-7	-4
Total of interest rate related instruments	**8 992**	**10 300**	**71**	**29**	**-18**	**-26**
Options on equity securities	**2 925**	**12 018**	**149**	**79**	**-135**	**-539**
Total derivative financial instruments included in marketable securities and in short term financial debt	**32 577**	**40 689**	**605**	**179**	**-575**	**-961**
Currency related instruments included in other current assets and liabilities						
Forward foreign exchange rate contracts	3 367	2 390	198	62		
Over the counter currency options	1 673	944	10	51	-2	-8
Total currency related instruments included in other current assets and liabilities	**5 040**	**3 334**	**208**	**113**	**-2**	**-8**
Total derivative financial instruments	**37 617**	**44 023**	**813**	**292**	**-577**	**-969**

The contract or underlying principal amount of derivative financial instruments at December 31, 2002 and 2001 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 2002 CHF millions	Total 2001 CHF millions
Currency related instruments							
Forward foreign exchange rate contracts		877	8 768	2 277	125	12 047	7 114
Over the counter currency options		3 207	6 597		1 079	10 883	13 259
Cross currency swaps		2 770				2 770	1 332
Currency related derivatives		**6 854**	**15 365**	**2 277**	**1 204**	**25 700**	**21 705**
Interest rate related instruments							
Interest rate swaps	3 900	292				4 192	3 700
Forward rate agreements	3 850					3 850	6 450
Interest rate options	950					950	150
Interest rate related derivatives	**8 700**	**292**				**8 992**	**10 300**
Options on equity securities		**393**	**2 532**			**2 925**	**12 018**
Total derivative financial instruments	**8 700**	**7 539**	**17 897**	**2 277**	**1 204**	**37 617**	**44 023**

16. Marketable securities and derivative financial instruments (continued)

Derivative financial instruments effective for hedge accounting purposes	Contract or underlying principal amount		Fair values	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Anticipated transaction hedges				
Forward foreign exchange rate contracts	4 186	2 381	223	83
Over the counter currency options	1 674	4 661	10	66
Total of anticipated transaction hedges	**5 860**	**7 042**	**233**	**149**
Net investment in foreign subsidiary hedges				
Forward foreign exchange rate contracts		2 720		-133
Total of net investment in foreign subsidiary hedges		**2 720**		**-133**
Available-for-sale security hedges				
Options on securities		2 611		-125
Total of available-for-sale security hedges		**2 611**		**-125**
Total of derivative financial instruments effective for hedge accounting purposes	**5 860**	**12 373**	**233**	**-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 2003.

Marketable securities, time deposits and derivative financial instruments

	2002 CHF millions	2001 CHF millions
Available-for-sale marketable securities		
Equity securities	1 763	3 448
Debt securities	5 952	4 560
Total available-for-sale marketable securities	**7 715**	**8 008**
Time deposits longer than 90 days	1 076	2 689
Derivative financial instruments	495	135
Accrued interest on derivative financial instruments	53	32
Accrued interest on debt securities	128	141
Total marketable securities, time deposits and derivative financial instruments	**9 467**	**11 005**

During 2002, no unrealized losses on available-for-sale marketable securities were considered to be other than temporary and charged to the income statement (2001: CHF 81 million)

17. Details of shares and share capital movements

	Number of outstanding shares[1]					
	Dec 31, 2000 before share split	Dec 31, 2000 after share split[2]	Movement in year	Dec 31, 2001	Movement in year	Dec 31, 2002
Total Novartis shares	**72 130 117**	**2 885 204 680**		**2 885 204 680**	**-61 054 680**	**2 824 150 000**
Treasury shares						
Shares reserved for convertible bonds	117 916	4 716 640	-212 886	4 503 754	-4 503 754	
Shares reserved for call options			54 901 962	54 901 962		54 901 962
Unreserved treasury shares	6 845 311	273 812 440	3 806 264	277 618 704	16 658 715	294 277 419
Total treasury shares	**6 963 227**	**278 529 080**	**58 495 340**	**337 024 420**	**12 154 961**	**349 179 381**
Total outstanding shares	**65 166 890**	**2 606 675 600**	**-58 495 340**	**2 548 180 260**	**-73 209 641**	**2 474 970 619**

	CHF millions	CHF millions	CHF millions	CHF millions	CHF millions	CHF millions
Share capital	1 443	1 443		1 443	-31	1 412
Treasury shares	-139	-139	-30	-169	-6	-175
Outstanding share capital	**1 304**	**1 304**	**-30**	**1 274**	**-37**	**1 237**

[1] All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 277 069 019 treasury shares, are dividend bearing.
[2] On March 22, 2001 the Novartis AG 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

	2002 CHF millions	2001 CHF millions
Convertible bonds		1 182
Straight bonds	3 617	2 325
Liabilities to banks and other financial institutions[1]	167	277
Finance lease obligations	203	4
Total (including current portion of long-term debt)	**3 987**	**3 788**
Less current portion of long-term debt	-156	-1 288
Total long-term debts	**3 831**	**2 500**

		2002 CHF millions	2001 CHF millions
Convertible bonds			
USD	USD 750 million 2.00% convertible bonds 1995/2002 of Novartis Capital Ltd., British Virgin Islands[2]		1 163
CHF	CHF 750 million 1.25% convertible bonds 1995/2002 of Novartis Capital Ltd., British Virgin Islands[3]		19
Total convertible bonds			**1 182**
Straight bonds			
USD	USD 300 million 6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Florham Park, New Jersey, USA	420	504
USD	USD 250 million 6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Florham Park, New Jersey, USA	351	420
USD	USD 36 million 9.0% bonds 2006 of Gerber Products Company, Fremont, Michigan, USA	50	60
EUR	EUR 900 million 4.0% bond 2001/2006 of Novartis Securities Investment Ltd., Hamilton, Bermuda[4]	1 319	1 341
EUR	EUR 1 billion 3.75% bond 2002/2007 of Novartis Securities Investment Ltd., Hamilton, Bermuda[5]	1 477	
Total straight bonds		**3 617**	**2 325**

[1] Average interest rate 3.4%. (2001: 3.6%).
[2] Bonds of USD 10 000 par value were convertible up to September 30, 2002 into approximately 384.17 shares of Novartis AG. The Group either held treasury shares for this conversion or could obtain the shares under a hedging transaction at the conversion rate. All of the bonds except USD 120 000 were converted and these USD 120 000 of bonds were repaid.
[3] Bonds of CHF 5 000 par value were convertible up to October 9, 2002 into 200 shares of Novartis AG and 5 shares of Syngenta AG with each converting bondholder receiving CHF 239.95 per bond in cash. The Group held treasury shares and Syngenta AG shares to cover the conversion. All of the bonds were converted.
[4] Swapped into Japanese yen on inception and transformed into Swiss francs in 2002.
[5] Swapped into Japanese yen on inception.

18. Long-term financial debts

		2002 CHF millions	2001 CHF millions
Breakdown by maturity	2002		1 288
	2003	156	38
	2004	49	49
	2005	863	940
	2006	1 384	1 416
	2007	1 490	
	Thereafter	45	57
Total		**3 987**	**3 788**
Breakdown by currency	USD	1 042	2 174
	EUR	137	174
	JPY	1 477	1 392
	CHF	1 320	20
	Others	11	28
Total		**3 987**	**3 788**

Fair value comparison	2002 Balance Sheet CHF millions	2002 Fair Values CHF millions	2001 Balance Sheet CHF millions	2001 Fair Values CHF millions
Convertible bonds			1 182	1 713
Straight bonds	3 617	3 750	2 325	2 348
Others	370	370	281	281
Total	**3 987**	**4 120**	**3 788**	**4 342**

Collateralized long-term debts and pledged assets	2002 CHF millions	2001 CHF millions
Total amount of collateralized		
long-term financial debts	166	235
Total net book value of tangible		
fixed assets pledged as		
collateral for long-term financial debts	94	81

The percentage of fixed rate debt to total financial debt was 46% at December 31, 2002 and 2001.

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

19. Provisions and other long-term liabilities

	2002 CHF millions	2001 CHF millions
Employee benefits		
– unfunded defined benefit plans	1 042	1 102
– other long-term employee benefits and deferred compensation	251	186
Other post-employment benefits	591	698
Liabilities for insurance activities	907	719
Environmental provisions	226	224
Provision for legal and product liability settlements	357	337
Deferred purchase consideration	13	
Restructuring provision	4	10
Other provisions	635	554
Total	**4 026**	**3 830**

a) 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 6% per annum 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, 2002 consists of CHF 115 million provided for remediation at third-party sites and CHF 114 million for remediation of owned facilities. In the USA, Novartis has been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party ("PRP") in respect to certain sites. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The estimated 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.

In connection with the 1997 spin-off of CIBA Specialty Chemicals AG ("CSC") from Novartis AG, a Novartis affiliate has agreed to reimburse CSC 50% of the costs: (i) associated with environmental liabilities arising in the United States from the operations of the specialty chemicals business of the US affiliates of the former Ciba-Geigy AG, and (ii) which exceed reserves agreed between that affiliate and CSC. The reimbursement obligations are not subject to any time limits but could terminate for certain liabilities in the US upon the occurrence of certain contingencies which include the merger of CSC or the sale of its assets.

Novartis believes that its total reserves for environmental matters are adequate based upon currently available information, however, given the inherent difficulties in estimating liabilities in this area, it cannot be guaranteed that additional costs will not be incurred beyond the amounts 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.

The following table shows the movements in the environmental liability provisions during 2002 and 2001:

	2002 CHF millions	2001 CHF millions
January 1	**228**	**214**
Cash payments	-4	-3
Releases	-1	-6
Additions	13	22
Translation effect, net	-7	1
December 31	**229**	**228**
Less short-term liability	-3	-4
Long-term liability at December 31	**226**	**224**

b) Legal and product liabilities

General: A number of Group companies are 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. In the interest of transparency Novartis is providing information on the following cases:

SMON: (Subacute Myleo Optico Neuropathy): In 1996 Ciba-Geigy, one of the predecessor companies of Novartis together with two other pharmaceutical companies settled certain product liability issues related to sales of its product Clioquinol in Japan. Under the settlement, Novartis is required to pay certain future health care costs of the claimants.

Ritalin: In 2000, Novartis was named as defendant in 5 class action lawsuits and several claims involving *Ritalin*. The plaintiffs are consumers and third party payors who have alleged that Novartis and others have been involved in "fraud and conspiracy" in the over-promotion of ADHD (attention deficit hyperactive disorder) and *Ritalin*. All class actions have been dismissed with only two personal injury claims remaining on appeal.

Augmentin® (amoxicillin/potassium clavulanate): In June 2002 Geneva Pharmaceuticals Inc., (Geneva) launched a generic version of Augmentin® in the US after a May 2002 decision of the US District Court for the Eastern District of Virginia invalidating certain GlaxoSmithKline (GSK) patents pertaining to Augmentin®. GSK has appealed this ruling.

In addition GSK has initiated actions against Novartis affiliates in a Colorado state court and before the US International Trade Commission, alleging that the potassium clavulanate in the product sold by Geneva is produced using a micro organism strain allegedly stolen from GSK, an allegation which the Novartis affiliates deny.

PPA: Novartis affiliates are parties to over 300 lawsuits in the United States brought by people in 2001 and 2002 who claim to have been injured by products containing phenylpropanolamine (PPA) sold by certain of those affiliates. These cases are in various stages of prosecution with the first trials set for 2003.

Pharmaceutical Antitrust Litigation: Novartis affiliates, along with numerous other prescription drug manufacturers, are defendants in various actions brought by certain US retail pharmacies, alleging antitrust and pricing violations.

Parlodel: Since November 1986, Novartis affiliates have been defendants in lawsuits alleging personal injuries resulting from the administration of *Parlodel* for, among other indications, inhibition of post partum lactation. Currently, there are 25 cases pending. They are in various stages of discovery and/or motion practice. Four cases currently have trial dates in 2003.

Borison and Diamond: Dr. Borison and Dr. Diamond were clinical investigators who had conducted clinical trials for many

19. Provisions and other long-term liabilities (continued)

pharmaceutical companies, including Ciba-Geigy and Sandoz. Borison and Diamond were indicted by the State of Georgia for diverting payments from pharmaceutical companies from their employer, the Medical College of Georgia, to themselves. The investigation also brought to light allegations relating to informed consent and faulty patient care practices. Borison and Diamond pleaded guilty to a variety of felonies. Several lawsuits, known as Hodges, Huckeba, Lewis and Thomas, were filed against Novartis Pharmaceuticals Corporation on behalf of patients who participated in the clinical trials. Of these cases, only three remain. Of these, one, Huckeba, is a purported class action brought on behalf of 185 individuals. The cases are all in the early stages of discovery.

Terazosin: Geneva Pharmaceuticals, Inc. is a defendant in a number of lawsuits in the United States claiming injuries and damages allegedly arising out of violation of anti-trust laws in the settlement, by Geneva and Abbott Pharmaceuticals, of a contentious patent litigation involving Abbott's Hytrin® and Geneva's generic equivalent product.

Enteral Pump Investigation: The Department of Justice (DOJ) in the United States is investigating marketing and pricing practices of the enteral pump industry in the US. Novartis Nutrition Corporation is cooperating in the investigation.

Novartis does not believe plaintiffs were injured as a result of the actions of its affiliates and they are vigorously defending each of the cases described above.

The following table shows the movements in the legal and product liability provisions during 2002 and 2001:

	2002 CHF millions	2001 CHF millions
January 1	**530**	**639**
Cash payments	-93	-190
Releases	-26	-24
Additions	225	129
Translation effect, net	-46	-24
December 31	**590**	**530**
Less short-term liability	-233	-193
Long-term liability at December 31	**357**	**337**

20. Short-term financial debts

	2002 CHF millions	2001 CHF millions
Interest bearing employee accounts	1 145	1 134
Other bank and financial debt	890	1 637
Commercial paper	1 332	1 004
Current portion of long-term financial debt	156	1 288
Financial obligation for repurchase agreements		11
Fair value of derivative financial instruments	465	1 103
Total	**3 988**	**6 177**

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 including employee accounts was 3.5% and 3.8% in 2002 and 2001, respectively.

21. Other short-term liabilities

	2002 CHF millions	2001 CHF millions
Income and other taxes	767	879
Restructuring liabilities	133	226
Accrued expenses	3 321	3 479
Potential claims from insurance activities	289	299
Social security/pension funds	98	101
Environmental liabilities	3	4
Deferred income relating to government grants	19	22
Deferred purchase consideration		240
Goods returned and commission liabilities	13	14
Legal and product liability settlements	233	193
Other payables	970	754
Total	**5 846**	**6 211**

Restructuring charges: The Group has experienced significant merger and divestment activity since 1996, when Sandoz AG and Ciba-Geigy AG merged to form Novartis AG, 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 retained activities, 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 signifi-

cant actions associated with the restructuring charge were completed by December 31, 2002 with the exception of CHF 26 million relating primarily to non-cancellable lease payments for unoccupied office space in the U.S.

In October 2000, the CIBA Vision business unit 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, all of whom have left the Group as of December 31, 2002.

In November 2000, charges of CHF 15 million were incurred in conjunction with the closure and consolidation of part of the Generics operations in the USA. All of these charges were for employee termination costs. 200 employees were identified in the original plan, all of whom have left the Group as of December 31, 2002.

In December 2000, charges of CHF 40 million were incurred in conjunction with the closure and sale of the Pharmaceuticals division 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 48 remain employed by the Group as of December 31, 2002, but all of whom are expected to leave in 2003. 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, all of whom have left the Group as of December 31, 2002.

In October 2002, charges of CHF 30 million were incurred in conjunction with the divestment of the Food & Beverage business to Associated British Foods plc (ABF). The charges comprised employee termination costs of CHF 14 million and other third party costs of CHF 16 million. Originally 933 associates were identified as assigned to this business, of whom 866 were able to transfer to ABF. Natural attrition and internal redeployment limited necessary job losses to 45, of whom 42 remained employed by the Group as at December 31, 2002, but all of whom are expected to leave in 2003. All significant actions associated with the plan are expected to be completed during 2003.

In December 2002, provision was made for charges of CHF 40 million in conjunction with the plan to re-organize the Health Food and Slimming and Sports Nutrition businesses into a standalone unit called Nutrition & Santé. The charges comprised employee termination costs of CHF 26 million and other third party costs of CHF 14 million. It is expected that 120 job losses will result in 2003. All actions will be completed during 2003 and 2004.

In December 2002 charges of CHF 14 million were incurred in conjunction with the plan to restructure the OTC business. The charges comprised employee termination costs of CHF 12 million and other third party costs of CHF 2 million. It is expected that approximately 90 positions would be impacted by the restructuring, which is planned to be completed during 2003.

The releases to income in 2002 and 2001 of CHF 36 million and CHF 18 million respectively were mainly due to settlement of liabilities at lower amounts than originally anticipated.

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 2002, there were no (2001: CHF 30 million) tangible fixed asset impairments which were charged directly to the income statement without being recorded in the restructuring provision.

21. Other short-term liabilities (continued)

	Employee termination costs CHF millions	Tangible fixed asset impairments CHF millions	Other third party costs CHF millions	Total CHF millions
Balance at January 1, 2001	**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**
Cash payments	-30		-91	-121
Releases	-9	-20	-7	-36
Additions	52		32	84
Non-income tangible fixed asset write-offs		-6		-6
Translation effect, net	-7	-5	-8	-20
Balance at December 31, 2002	**65**	**21**	**51**	**137**
Included in short-term liabilities				133
Included in long-term liabilities				4
Total				**137**

22. Cash flows arising from changes in net current assets and other operating cash flow items

	2002 CHF millions	2001 CHF millions
Change in inventories	-676	-77
Change in trade accounts receivable and other net current assets	390	33
Change in trade accounts payable	113	249
Total	**-173**	**205**

23. 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:

	2002 Acquisitions CHF millions	2002 Divestments CHF millions	2001 Acquisitions CHF millions	2001 Divestments CHF millions
Tangible fixed assets	-251	90	-52	23
Other long-term assets	-42	7	-61	
Inventories	-187	28	-46	
Trade accounts receivable and other current assets	-158	49	-73	
Marketable securities, cash and short-term deposits	-154	30	-18	
Long-term and short-term debt to third parties	8	-31	148	
Trade accounts payable and other liabilities	207	32	83	2
Net assets acquired/divested	**-577**	**205**	**-19**	**25**
Less acquired/divested liquidity	153	-30	18	
Less decrease in investments in associated companies			111	
Sub-total	**-424**	**175**	**110**	**25**
Goodwill	-937		-349	
Changes in equity and minority interests				
Divestment gains		206		45
Amount settled in treasury shares	133			
Net Cash Flow	**-1 228**	**381**	**-239**	**70**

The significant changes in the companies that have been consolidated are described in note 2. All acquisitions, except for CHF 133 million which was for Novartis AG shares, were for cash.

24. Changes in consolidated equity

a) The 2002 and the 2001 changes in the fair value of financial instruments not recorded in the income statement and transfers to the income statement consist of the following:

	Fair value adjustments to marketable securities CHF millions	Fair value of deferred cash flow hedges CHF millions	Total CHF millions
Fair value adjustments at			
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 marketable securities and other financial assets	101		101
Deferred tax on above	73	11	84
Fair value adjustments at December 31, 2001	**1 054**	**-20**	**1 034**
Changes in fair value:			
– Available-for-sale marketable securities	-766		-766
– Cash flow hedges		223	223
– other financial assets	-533		-533
Realized gains or losses transferred to the income statement:			
– marketable securities sold	-270		-270
– derivative financial instruments		-137	-137
– other financial assets sold	-13		-13
Impaired other financial assets	100		100
Reclassification in equity[1]	-138	133	-5
Deferred tax on above	153	-18	135
Fair value adjustments at December 31, 2002	**-413**	**181**	**-232**

[1] Transfer of CHF 138 million of unrealized gains to retained earnings due to fair value adjustments on Syngenta AG shares retained by the Group after the 2000 Novartis Agribusiness spin-off and transfer of CHF 133 million of translation losses in connection with hedges of the translation of net investments in foreign subsidiaries.

b) The Group has investments in associated companies, principally Roche Holding AG and Chiron Corporation. The Novartis Group's share in movements in these companies equity other than relating to net income, are allocated directly to the Novartis Group's consolidated statement of changes in equity.

c) During 2001 bonds were sold and the subsidiary holding the bonds was liquidated. This resulted in 2001 in CHF 641 million of cumulative translation differences and a CHF 34 million hedging loss being transferred to financial income, net.

d) The Board of Directors proposes a dividend of CHF 0.95 per share for 2002 (2001: CHF 0.90 per share amounting to CHF 2.3 billion which was paid in 2002) totaling CHF 2.4 billion for all dividend bearing shares. 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.

e) CHF 1.5 billion of treasury shares were acquired during 2002 under the Group's third share buy-back program on the second trading line plus an additional CHF 3.9 billion of shares on the first trading line. These amounts were offset by the sale of treasury shares for CHF 0.3 billion and a reduction in treasury shares of CHF 0.3 billion as the result of shares used as settlement for an acquisition and for the conversion of debt to equity. This resulted in a net change in Group consolidated equity of CHF 4.8 billion (2001: CHF 3.8 billion).

f) 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.

g) During December 2001, 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

24. Changes in consolidated equity (continued)

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.

h) Recycling of gains arising during the year resulting from prior to 1995 goodwill which, in accordance with IAS in effect at the time, was written off directly to equity.

i) On March 21, 2002 the Annual General Meeting cancelled 61.1 million shares with a nominal value of CHF 31 million.

25. Employee benefits

a) Defined benefit plans: 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 following is a summary of the status of the main defined benefit plans at December 31, 2002 and 2001:

	2002 CHF millions	2001 CHF millions
Funded assets of independent defined benefit	20 164	23 361
Defined benefit obligations of active and retired employees of funded plans	-15 891	-17 901
Funded Status	**4 273**	**5 460**
Defined benefit obligations of active and retired employees of unfunded plans	-735	-715
Unrecognized actuarial losses/(gains)	371	-1 005
Net asset in balance sheet	**3 909**	**3 740**

The net asset in the balance sheet consists of:

	2002 CHF millions	2001 CHF millions
Prepaid pension expense included in financial assets	4 951	4 842
Accrued pension costs included in other long-term liabilities	-1 042	-1 102
Total net asset	**3 909**	**3 740**

The following are the principal actuarial assumptions, used for calculating the 2002 and 2001 income statement amounts and the above December 31, 2002 and 2001 funded status of the main defined benefit plans:

Weighted average %	Income statement 2002 %	Income statement 2001 %	Funded status 2002 %	Funded status 2001 %
Discount rate	4.5	4.6	4.5	4.6
Payroll indexation	2.8	2.8	2.8	2.8
Return on assets	6.1	6.1	6.1	6.1

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, 2002 amounts to CHF 251 million (2001: CHF 186 million). In 2002 contributions charged to the consolidated income statement for the defined contribution plans were CHF 120 million (2001: CHF 113 million).

The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2002 was 31.5 million shares with a market value of CHF 1.6 billion (2001: CHF 34 million shares with a market value of CHF 2.0 billion). These funds disposed of 2.5 million Novartis AG shares during the year ended December 31, 2002 (2001: 8.5 million shares). The amount of dividends received on Novartis AG shares held as plan assets by these funds was CHF 31 million for the year ended December 31, 2002 (2001: CHF 34 million).

b) Defined benefit plan and other post-employment benefit scheme balance sheet and income statement details:

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

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	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Asset/(liability) at January 1	**3 740**	**3 218**	**-698**	**-676**
Increase in prepaid pensions	109	736		
Decrease/(increase) in accrued liabilities	60	-214	107	-22
Asset/(liability) at December 31	**3 909**	**3 740**	**-591**	**-698**

The amounts recognized in the income statement are as follows

	Defined benefit pension plans		Other post-employment benefits	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Expected return on plan assets	1 362	1 517		
Employee contributions	9	33		
Current service cost	-389	-359	-19	-15
Interest cost	-774	-825	-51	-52
Amortization of actuarial gains and losses	-13	-21	-5	-5
Income/(expense)[1]	**195**	**345**	**-75**	**-72**

[1] In 2001 CHF 108 million of settlement gains associated with Group restructurings were included in pension income.

The actual return on plan assets for 2002 taking into account realized and unrealized capital gains and losses was a loss of CHF 1 646 million (2001: CHF 737 million loss).

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

	2002 Weighted average %	2001 Weighted average %
Discount rate	6.8	7.5
Healthcare cost trend (initial)	10.0	9.0
Healthcare cost trend (ultimate)	4.8	4.8

26. Employee share participation plans

Employee and management share participation plans exist as follows:

a) Novartis 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 one Novartis AG share at a predetermined strike price. Options granted before 2002 entitled the employees to acquire forty Novartis AG shares per option. In May 2001, the Novartis AG shares were split 40 to 1. The figures in the tables below have been restated for grants before 2002 to reflect this change. The number of options granted depends on the performance of the individuals and the business unit in which they work.

	2002		2001	
	Options (millions)	Weighted average exercise price CHF	Options (millions)	Weighted average exercise price CHF
Options outstanding at				
January 1	**7.2**	**59**	**5.9**	**53**
Granted	5.6	62	2.5	70
Exercised	-1.0	56	-1.0	50
Cancelled	-0.3	61	-0.2	59
Outstanding at December 31	**11.5**	**61**	**7.2**	**59**
Exercisable at December 31	**3.8**	**54**	**2.4**	**56**
Weighted average fair value of options granted during the year (CHF)		11		23

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, 2002:

	Options outstanding			Options exercisable	
Range of exercise prices (CHF)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (CHF)	Number exercisable (millions)	Weighted average exercise price (CHF)
41-50	0.8	4.1	43	0.8	43
51-70	10.7	7.2	62	3.0	57
	11.5	**7.0**	**61**	**3.8**	**54**

b) Novartis 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 division/business unit 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.

	2002		2001	
	ADS options (millions)	Weighted average exercise price (CHF)	ADS options (millions)	Weighted average exercise price (CHF)
Options outstanding at				
January 1	**8.5**	**70**		
Granted	15.8	52	8.8	70
Cancelled	-1.1	56	-0.3	70
Outstanding at December 31	**23.2**	**55**	**8.5**	**70**
Exercisable at December 31	**0.7**	**55**	**0.1**	**70**
Weighted average fair value of options granted during the year (CHF)		15		15

All ADS options were granted at an exercise price which was greater than the market price of the ADS at the grant date.

The following table summarizes information about ADS options outstanding at December 31, 2002:

	Options outstanding			Options exercisable	
Range of exercise prices (CHF)	Number outstanding (millions)	Average remaining contractual life (years)	Weighted average exercise price (CHF)	Number exercisable (millions)	Weighted average exercise price (CHF)
50-75	23.2	8.8	55	0.7	55

c) Long-Term Performance Plan: This plan is offered to selected executive officers. Under the Long-Term Performance Plan, participants are awarded the right to earn shares. Actual payouts depend on achievements of long-term targets such as economic value added relative to pre-determined strategic plan targets over a three-year period. To accommodate the starting phase of the Plan, "bridging periods" of one year duration were

introduced for the payouts in 2001, 2002 and 2003. During 2002 a total of 232 548 shares (2001: 298 974 shares) were granted to executive officers.

d) Leveraged Share Savings Plan: This program is 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 2002, 245 838 shares (2001: 209 210 shares) were chosen to be taken under this program instead of a cash bonus.

e) Other Management Share Plans: 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 five years. During 2002 a total of 117 902 shares (2001: 152 694 shares) were granted to executive officers and other employees.

f) New Swiss Employee Share Ownership Plan: A new Swiss Employee Share Ownership Plan (ESOP) was introduced as of January 1, 2002 to encourage employees in Switzerland to invest in Novartis. The new ESOP provides for the annual variable incentive to be delivered wholly in the form of Novartis AG shares at a fixed date at a fair market value at that date. Employees are free to sell 50% or 100% of these shares immediately. If the employees decide to keep the shares, they will receive one free share for each two owned under the ESOP after the blocking period of three years. In spring 2003 the Swiss employees will receive shares for the first time under this scheme.

g) Old Swiss Employee Share Ownership Plan: In 1998, a Swiss Employee Share Ownership Plan was introduced for all employees of Swiss subsidiaries. This entitled 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 was CHF 12.50 per share. From 2002 and 2001 employees were immediately required to buy the shares to which they have become entitled. During the year 406 448 shares (2001: 862 720 shares) were distributed under this plan. 2002 was the last year in which employees could purchase shares under this scheme. Employees, who joined Novartis after January 1, 2002, will participate in the new ESOP only.

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:

	2002 Number of shares (000)	2001 Number of shares (000)
January 1	**101 312**	**98 000**
Shares sold/bought	-5 238	4 175
Shares distributed to employees	-1 002	-863
December 31	**95 072**	**101 312**

The market value of the Novartis AG shares held by the foundation at December 31, 2002 was CHF 4.8 billion (2001: CHF 6.1 billion).

27. 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, 2002 included 95.1 million shares of Novartis AG with a market value of CHF 4.8 billion. As of December 31, 2001, the assets included 101.3 million Novartis shares with a market value of CHF 6.1 billion. This foundation is consolidated under US GAAP and is included as a reconciling item in the US GAAP reconciliation.

In 2002, the Group granted short-term loans totaling CHF 875 million to the above mentioned foundations and received short-term loans totaling CHF 3 million from them. In 2001, the Group granted short-term loans totaling CHF 1 189 million to the foundations, received short-term loans totaling CHF 10 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, 2002 these foundations held approximately 6.1 million shares of Novartis, with a cost of approximately CHF 39 million.

See notes 5, 25 and 26 to the consolidated financial statements for disclosure of other related party transactions and balances.

28. Commitments and contingencies

Spin-off of Novartis Agribusiness: In connection with the Master Agreement between Novartis AG and AstraZeneca Plc for the spin-off and merger of their respective agrochemical businesses into Syngenta AG due to time consuming local legal requirements and administrative proceedings, there remain several assets which are not significant to the business of Novartis that have not been transferred as of December 31, 2002. All necessary administrative proceedings have been initiated and Novartis expects to complete all remaining transfers during 2003.

As an accommodation to permit an orderly separation of the businesses, Novartis and Syngenta, and their local subsidiaries, have agreed to continue 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 significant to the business of Novartis.

Chiron Corporation: In connection with its original investment in 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 403 million reduces the equity put amount mentioned above. Novartis' obligation under the guarantee is only effective if Chiron defaults on the debt.

The outstanding equity put and guarantee expire no later than 2011.

Leasing commitments:		**2002 CHF millions**
Commitments arising from fixed-term operational leases		
in effect at December 31 are as follows:	2003	259
	2004	201
	2005	154
	2006	112
	2007	95
	Thereafter	492
Total		**1 313**
Expense of current year		**284**

Research & development commitments: The Group has entered into long-term research agreements with various institutions, including CHF 347 million of potential milestone and other contingent payments. As of December 31, 2002 they are as follows:

	2002 CHF millions
2003	368
2004	221
2005	136
2006	115
2007	21
Thereafter	80
Total	**941**

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 these actions 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.

29. Principal currency translation rates

			2002 CHF	2001 CHF
Year end rates used for the consolidated balance sheets:				
	1	USD	1.40	1.68
	1	EUR	1.46	1.48
	1	GBP	2.25	2.43
	100	JPY	1.17	1.28
Average rates of the year used for the consolidated income and cash flow statements:				
	1	USD	1.55	1.69
	1	EUR	1.47	1.51
	1	GBP	2.33	2.43
	100	JPY	1.24	1.39

30. Group subsidiaries and associated companies

As at December 31, 2002

	Equity interest	Holding/Finance	Sales	Production	Research
Argentina					
Novartis Argentina S.A., Buenos Aires	●		◆	▼	
Australia					
Novartis Australia Pty Ltd., North Ryde, NSW	●	■			
Novartis Pharmaceuticals Australia Pty Ltd., North Ryde, NSW	●		◆		▲
Novartis Consumer Health Australasia Pty Ltd., Rowville, Victoria	●		◆	▼	
Novartis Animal Health Australasia Pty Ltd., Pendle Hill, NSW	●		◆		▲
Austria					
Novartis Pharma GmbH, Vienna	●		◆		
Novartis Forschungsinstitut GmbH, Vienna	●				▲
Biochemie GmbH, Kundl	●	■	◆	▼	▲
Novartis Animal Health GmbH, Kundl	●		◆		
Bangladesh					
Novartis (Bangladesh) Limited, Dhaka	◗		◆	▼	
Belgium					
N.V. Novartis Management Services S.A., Vilvoorde	●	■			
N.V. Novartis Pharma S.A., Vilvoorde	●		◆		
N.V. Novartis Consumer Health S.A., Bruxelles	●		◆		
N.V. CIBA Vision Benelux S.A., Mechelen	●		◆		
Bermuda					
Triangle International Reinsurance Ltd., Hamilton	●	■			
Novartis Securities Investment Ltd., Hamilton	●	■			
Novartis International Pharmaceutical Ltd., Hamilton	●	■	◆		
Brazil					
Novartis Biociências S.A., São Paulo	●		◆	▼	
Novartis Saúde Animal Ltda., São Paulo	●		◆	▼	
Canada					
Novartis Pharmaceuticals Canada Inc., Dorval/Montreal	●		◆		▲
Novartis Consumer Health Canada Inc., Mississauga, Ontario	●		◆		
CIBA Vision Canada Inc., Mississauga, Ontario	●		◆	▼	
Chile					
Novartis Chile S.A., Santiago de Chile	●		◆		
China					
Beijing Novartis Pharma Ltd., Beijing	◗		◆	▼	
Novartis Pharmaceuticals (HK) Limited, Hong Kong	●		◆		
Shanghai Novartis Trading Ltd., Shanghai	●		◆		
Colombia					
Novartis de Colombia S.A., Santafé de Bogotá	●		◆	▼	
Costa Rica					
Novartis Consumer Health, S.A., San José	●		◆	▼	
Czech Republic					
Novartis s.r.o., Prague	●		◆		
Denmark					
Novartis Healthcare A/S, Copenhagen	●		◆		
Ecuador					
Novartis Ecuador S.A., Quito	●		◆		
Egypt					
Novartis Pharma S.A.E., Cairo	●			▼	
Novartis Egypt (Healthcare) S.A.E., Cairo	●		◆		
Finland					
Novartis Finland Oy, Espoo	●		◆		
France					
Novartis Groupe France S.A., Rueil-Malmaison	●	■			
Novartis France S.A.S., Rueil-Malmaison	●	■			
Novartis Pharma S.A.S., Rueil-Malmaison	●		◆	▼	▲
Novartis Ophthalmics S.A., Rueil-Malmaison	●		◆		
GNR-pharma S.A.S., Levallois Perret	●		◆		
Novartis Santé Familiale S.A.S., Revel	●		◆	▼	
Novartis Santé Animale S.A., Rueil-Malmaison	●		◆	▼	
Novartis Nutrition S.A.S., Revel	●		◆	▼	
Nutrition et Santé S.A., Revel	●	■	◆	▼	▲
CIBA Vision S.A.S., Blagnac	●		◆		
Germany					
Novartis Deutschland GmbH, Wehr	●	■			
Novartis Pharma GmbH, Nuremberg	●		◆	▼	▲
Azupharma GmbH & Co., Gerlingen near Stuttgart	●		◆	▼	
BC Biochemie GmbH, Frankfurt am Main	●		◆	▼	
Novartis Consumer Health GmbH, Munich	●		◆	▼	▲
Novartis Nutrition GmbH, Munich	●		◆	▼	▲
CIBA Vision Vertriebs GmbH, Grossostheim	●		◆		
CIBA Vision GmbH, Grosswallstadt	●		◆	▼	▲
Great Britain					
Novartis UK Ltd., Farnborough	●	■			
Novartis Pharmaceuticals UK Ltd., Frimley/Camberley	●		◆	▼	▲
Novartis Grimsby Ltd., Farnborough	●			▼	
Lagap Pharmaceuticals Ltd., Bordon	●		◆		
Novartis Consumer Health UK Ltd., Horsham	●		◆	▼	
Novartis Animal Health UK Ltd., Royston	●		◆		▲
Vericore Ltd., Royston	●		◆	▼	
CIBA Vision (UK) Ltd., Southampton	●		◆		
Greece					
Novartis (Hellas) S.A.C.I., Athens	●		◆		
Hungary					
Novartis Hungary Healthcare Limited Liability Company, Budapest	●		◆		
India					
Novartis India Limited, Mumbai	◗		◆	▼	
Novartis Enterprises Private Limited, Mumbai	●		◆	▼	
Indonesia					
PT Novartis Biochemie, Jakarta	◗		◆	▼	
PT CIBA Vision Batam, Batam	●			▼	
Ireland					
Novartis Ireland Limited, Dublin	●		◆		
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	●			▼	
Italy					
Novartis Farma S.p.A., Origgio	●	■	◆	▼	▲
Biochemie S.p.A., Rovereto	●			▼	
Novartis Consumer Health S.p.A., Origgio	●		◆		
CIBA Vision S.r.l., Marcon	●		◆		
Japan					
Novartis Pharma K.K., Tokyo	●		◆		▲
Ciba-Geigy Japan Limited, Tokyo	●			▼	
CIBA Vision K.K., Tokyo	●		◆		
Luxembourg					
Novartis Investments S.à r.l., Luxembourg	●	■			

The following describe the various types of entities within the Group:

■ **Holding/Finance:** This entity is a holding company and/or performs finance functions for the Group.

◆ **Sales:** This entity performs sales and marketing activities for the Group.

▼ **Production:** This entity performs manufacturing and/or production activities for the Group.

▲ **Research:** This entity performs research and development activities for the Group.

● = subsidiary > 90% of the voting rights – fully consolidated

◗ = subsidiary; above 50% and up to 90% of the voting rights – fully consolidated

❍ = investment in associated company; above 20% up to 50% of the voting rights – equity method accounting

	Equity interest	Holding/Finance	Sales	Production	Research
Malaysia					
Novartis Corporation (Malaysia) Sdn. Bhd., Kuala Lumpur	◗		◆		
Mexico					
Novartis de México, S.A. de C.V., Mexico City	●	■			
Novartis Farmacéutica, S.A. de C.V., Mexico City	●		◆	▼	
Novartis Nutrition, S.A. de C.V., Mexico City	●		◆		
Productos Gerber, S.A. de C.V., Mexico City	●		◆	▼	
Netherlands					
Novartis Netherlands B.V., Amsterdam	●	■			
Novartis Pharma B.V., Arnhem	●		◆		
Multipharma B.V., Weesp	●		◆	▼	
Novartis Consumer Health B.V., Breda	●		◆	▼	
Netherlands Antilles					
Biochemie West Indies N.V., Curação	●	■	◆		
New Zealand					
Novartis New Zealand Ltd., Auckland	●		◆		
Norway					
Novartis Norge AS, Oslo	●		◆		
Pakistan					
Novartis Pharma (Pakistan) Limited, Karachi	●		◆	▼	
Panama					
Novartis Pharma (Logistics), Inc., Panama	●		◆		
Peru					
Novartis Biosciences Perú S.A., Lima	●		◆		
Philippines					
Novartis Healthcare Philippines, Inc., Makati/Manila	●		◆		
Poland					
Novartis Poland Sp. z o.o., Warsaw	●		◆		
Alima-Gerber S.A., Warsaw	●		◆	▼	
Portugal					
Novartis Portugal SGPS Lda., Sintra	●	■			
Novartis Farma – Produtos Farmacêuticos S.A., Sintra	●		◆		
Novartis Consumer Health – Produtos Farmacêuticos e Nutrição Lda., Lisbon	●		◆		
Puerto Rico					
Gerber Products Company of Puerto Rico, Inc., Carolina	●		◆	▼	
CIBA Vision Puerto Rico, Inc., Cidra	●			▼	
Russian Federation					
Novartis Pharma ZAO, Moscow	●		◆		
Singapore					
Novartis Institute for Tropical Diseases Pte Ltd., Singapore	●				▲
Slovenia					
Lek Pharmaceuticals d.d., Ljubljana	●	■	◆	▼	▲
South Africa					
Novartis South Africa (Pty) Ltd., Spartan/Johannesburg	●		◆	▼	
South Korea					
Novartis Korea Ltd., Seoul	●		◆	▼	
Spain					
Novartis Farmacéutica, S.A., Barcelona	●	■	◆	▼	
Biochemie, S.A., Les Franqueses del Vallés/Barcelona	●		◆	▼	▲
Novartis Consumer Health, S.A., Barcelona	●		◆	▼	
Sweden					
Novartis Sverige Participations AB, Täby/Stockholm	●	■			
Novartis Sverige AB, Täby/Stockholm	●		◆		
CIBA Vision Nordic AB, Askim/Göteborg	●		◆		

	Equity interest	Holding/Finance	Sales	Production	Research
Switzerland					
Novartis International AG, Basel	●	■			
Novartis Holding AG, Basel	●	■			
Novartis Securities AG, Basel	●	■			
Novartis Research Foundation, Basel	●				▲
Novartis Foundation for Management Development, Basel	●	■			
Roche Holding AG, Basel	❍	■	◆	▼	▲
Novartis Pharma AG, Basel	●	■	◆	▼	▲
Novartis Ophthalmics AG, Hettlingen	●	■	◆	▼	▲
Novartis Pharma Services AG, Basel	●		◆		
Novartis Pharma Schweizerhalle AG, Schweizerhalle	●			▼	
Novartis Pharma Stein AG, Stein	●			▼	▲
Novartis Pharma Schweiz AG, Bern	●		◆		
Novartis Consumer Health S.A., Nyon	●	■	◆	▼	▲
Novartis Consumer Health International S.A., Nyon	●		◆		
Novartis Consumer Health Schweiz AG, Bern	●		◆		
Novartis Animal Health AG, Basel	●	■	◆	▼	▲
Novartis Centre de Recherche Santé Animale S.A., St.Aubin	●				▲
Novartis Nutrition AG, Bern	●	■			
CIBA Vision AG, Embrach	●	■	◆		
Taiwan					
Novartis (Taiwan) Co., Ltd., Taipei	●		◆	▼	
Thailand					
Novartis (Thailand) Limited, Bangkok	●		◆		
Turkey					
Novartis Saglik, Gida ve Tarim Ürünleri Sanayi ve Ticaret A.S., Istanbul	●		◆	▼	
USA					
Novartis Corporation, Florham Park, NJ	●	■			
Novartis Finance Corporation, New York, NY	●	■			
Novartis Pharmaceuticals Corporation, East Hanover, NJ	●		◆	▼	▲
Novartis Ophthalmics, Inc., Duluth, GA	●		◆	▼	
Novartis Institutes for BioMedical Research, Inc., Cambridge, MA	●				▲
Novartis Institute for Functional Genomics, Inc., San Diego, CA	●				▲
Genetic Therapy, Inc., Gaithersburg, MD	●				▲
Chiron Corporation, Emeryville, CA	❍	■	◆	▼	▲
Geneva Pharmaceuticals, Inc., Princeton, NJ	●		◆	▼	▲
Biochemie U.S., Inc., Broomfield, CO	●		◆		
Novartis Consumer Health, Inc., Parsippany, NJ	●		◆	▼	▲
Novartis Animal Health US, Inc., Greensboro, NC	●		◆	▼	▲
Novartis Animal Vaccines, Inc., Overland Park, KS	●		◆	▼	▲
Novartis Nutrition Corporation, Minneapolis, MN	●		◆	▼	▲
Gerber Products Company, Fremont, MI	●	■	◆	▼	▲
Gerber Life Insurance Company, White Plains, NY	●		◆		
CIBA Vision Corporation, Duluth, GA	●	■	◆	▼	▲
Venezuela					
Novartis de Venezuela S.A., Caracas	●		◆		
Novartis Nutrition de Venezuela S.A., Caracas	●		◆	▼	

In addition, the Group is represented by subsidiaries, associated companies or joint ventures in the following countries:
Algeria, British Virgin Islands, Croatia, Dominican Republic, Guatemala, the former Yugoslav Republic of Macedonia, Morocco, Nigeria, Romania, Uruguay and Yugoslavia.

31. 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	2002 CHF millions	2001 CHF millions
Net income under IAS		**7 313**	**7 024**
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a	-456	-321
Purchase accounting: other acquisitions	b	-462	-279
Purchase accounting: IAS goodwill amortization	c	218	
Available-for-sale securities and derivative financial instruments	d	-423	-511
Pensions provisions	e	38	-310
Share-based compensation	f	-185	-38
Consolidation of share-based employee compensation foundation	g	-31	-37
Deferred taxes	h	-145	-31
In-process research and development	i	-16	-936
Other	j	-165	28
Deferred tax effect on US GAAP adjustments		219	114
Net income under US GAAP		**5 905**	**4 703**
Basic earnings per share under US GAAP (CHF)		2.44	1.90
Diluted earnings per share under US GAAP (CHF)		2.39	1.90

	Notes	Dec 31, 2002 CHF millions	Dec 31, 2001 CHF millions
Equity under IAS		**39 682**	**42 245**
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a	4 370	4 826
Purchase accounting: other acquisitions	b	4 230	5 549
Purchase accounting: IAS goodwill amortization	c	218	
Pensions provisions	e	1 507	1 431
Share-based compensation	f	-220	-58
Consolidation of share-based employee compensation foundation	g	-686	-939
Deferred taxes	h	-765	-621
In-process research and development	i	-1 380	-1 392
Other	j	-50	102
Deferred tax effect on US GAAP adjustments		-260	-396
Equity under US GAAP		**46 646**	**50 747**

Components of equity in accordance with US GAAP

	Dec 31, 2002 CHF millions	Dec 31, 2001 CHF millions
Share capital	1 412	1 443
Treasury shares, at nominal value	-223	-220
Share premium	1 572	1 338
Retained earnings	46 336	47 422
Accumulated other comprehensive income:		
Currency translation adjustment	-2 230	46
Unrealized market value adjustment on available-for-sale securities, net of taxes of CHF -16 million (2001: CHF 115 million)	-402	738
Unrealized market value adjustment on cash-flow hedges, net of taxes of CHF 42 million (2001: CHF 24 million)	181	-20
December 31	**46 646**	**50 747**

Changes in US GAAP equity

	2002 CHF millions	2001 CHF millions
January 1	**50 747**	**48 907**
Net income for the year under US GAAP	5 905	4 703
Dividends paid	-2 207	-2 194
Net unrealized market value adjustment	-801	-446
Increase in share premium related to share-based compensation	24	46
Foreign currency translation adjustment	-2 241	-275
Associated companies' equity movement	-146	
Acquisition of treasury shares	-4 635	-4 005
Issue of call and put options on Novartis shares		4 011
December 31	**46 646**	**50 747**

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 did 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. All of the purchase price was allocated to identified tangible and intangible assets with a definite useful life. There was therefore no residual goodwill arising from accounting for this transaction.

The components of the equity and income statement adjustments related to the US GAAP purchase accounting adjustment for 2002 and 2001 are as follows:

	2002 Components to reconcile		2001 Components to reconcile	
	Net income CHF millions	Equity CHF millions	Net income CHF millions	Equity CHF millions
Intangible assets related to marketed products	-642	5 795	-429	6 437
Tangible fixed assets	69	-960	69	-1 029
Inventory		711		711
Other identifiable intangibles	-32	125	-32	157
Investments		169	-34	169
Deferred taxes	149	-1 470	105	-1 619
Total adjustment	**-456**	**4 370**	**-321**	**4 826**

The intangible assets related to marketed products and other identifiable intangibles are being amortized over 15 and 10 years, respectively.

b) Purchase accounting: other acquisitions: Prior to January 1, 1995, the Group wrote off all goodwill, being the difference between the purchase price and the aggregate fair value of tangible and intangible assets and liabilities acquired in a business combination, directly to equity, in accordance with IAS existing at that time. The adoption of IAS 22 (revised 1993) required that goodwill be capitalized and amortized, however, did not require prior period restatement. The material component of goodwill recorded directly to equity, under IAS prior to January 1, 1995, related to the acquisition of Gerber Products in 1994. The net book value of goodwill under US GAAP attributable to Gerber Products was CHF 4 026 million and CHF 4 815 million as of December 31, 2002 and 2001, respectively.

In accordance with IAS 22, 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 pre-1995 business combination is also capitalized as goodwill. Effective January 1, 2002, the Group adopted Statement of Financial Accounting Standards No. 142 (SFAS 142), *"Goodwill and other Intangible Assets"*. SFAS 142 requires that all goodwill and other intangible assets existing on implementation on January 1, 2002

be tested for impairment and thereafter be assessed for impairment on an annual basis. From January 1, 2002 goodwill and intangible assets deemed to have an indefinite useful life are no longer amortized on a regular basis. For the purpose of the reconciliation to US GAAP, goodwill was generally amortized through the income statement over an estimated useful life of 20 years up to December 31, 2001. Therefore, there was no amortization charge in 2002 under US GAAP.

However, as a result of the decision to divest certain products and adverse changes in the operating environment of certain businesses, in accordance with SFAS 142, non-cash charges of CHF 355 million were recorded in 2002 for impairments of goodwill and divestments. Also included are US GAAP adjustments to the equity method accounting results of Roche and Chiron totaling CHF 107 million. The impact of the additional impairment charges and the Roche and Chiron adjustments resulted in a CHF 462 million charge in 2002.

Note k (xi) provides further disclosure regarding impairment under US GAAP.

The expense of CHF 279 million recorded in 2001 relates to goodwill amortization under US GAAP.

c) Purchase accounting: IAS goodwill amortization: As described above, goodwill is no longer amortized but is only subject to impairment testing under US GAAP as of January 1, 2002. The corresponding reversal of the regular goodwill amortization under IAS resulted in an additional income in the US GAAP reconciliation of CHF 218 million for 2002.

d) Available-for-sale marketable 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. The Group's application of IAS 39 from January 1, 2001 is now consistent with US GAAP. Investments classified as available-for-sale are carried at fair value, with any unrealized gain or loss recorded as a separate component of equity. 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 2002 and 2001.

Prior to the adoption of IAS 39 on January 1, 2001 under IAS, the Group used the concept of portfolio valuation for its derivative financial instruments 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 resulted in a difference between the IAS and US GAAP income statements in 2001 due to recognition of gains or losses in different periods.

The above differences result in an additional US GAAP expense of CHF 423 million in 2002 (2001: CHF 511 million).

At December 31, 2002 and 2001 the balance sheet values of all available-for-sale marketable securities and derivative financial instruments under IAS and US GAAP were the same.

e) Pension provisions: 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 87 *"Employers' Accounting for Pensions"* and the disclosure is presented in accordance with SFAS 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 was

of an average long-term nature, whereas US GAAP required that the discount rate is based on a rate at which the obligations could be currently settled. From January 1, 1999, IAS and US GAAP accounting rules in this area are essentially the same, however, adjustments arise when reconciling from IAS to US GAAP due to the pre-1999 accounting rule differences.

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:

	2002 CHF millions	2001 CHF millions
Pension benefits:		
Prepaid asset recognized for IAS	3 909	3 740
Difference in unrecognized amounts	1 681	1 637
Prepaid asset recognized for US GAAP	**5 590**	**5 377**
Net periodic income recognized for IAS	195	345
Difference in amortization of actuarial amounts	27	-237
Net periodic pension benefit income recognized for US GAAP	**222**	**108**
Other post-employment benefits:		
Liability recognized for IAS	-591	-698
Difference in unrecognized amounts	-174	-206
Liability recognized for US GAAP	**-765**	**-904**
Net periodic benefit cost recognized for IAS	-75	-72
Amortization of actuarial amounts	11	-73
Net periodic post-employment benefit costs recognized for US GAAP	**-64**	**-145**
Total US GAAP income statement difference on pensions and other post-employment benefits	**38**	**-310**

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 (APB 25) *"Accounting for Stock Issued to Employees"* and related interpretations in accounting for its plans. As described in Note 26, the Group has several plans that are subject to measurement under APB 25. These include the Long-Term Performance Plan, the Leveraged Share Savings Plan the other Management Share Plans, the old and new Swiss Employee Share Ownership Plans and the US Management ADS Appreciation Cash Plan.

Compensation expense recognized under the Long-Term Performance Plan was CHF 22 million for the year ended December 31, 2002 (2001: CHF 11 million).

The Leveraged Share Savings Plan is considered to be compensatory based on the fair value of the allocated Novartis 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 2002 (2001: CHF 17 million).

The other Management Share Plans 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 6 million for the year ended December 31, 2002 (2001: CHF 1 million).

The new Swiss Employee Share Ownership Plan (ESOP) is considered to be compensatory based on the fair value of Novartis AG shares at a fixed date. Compensation expense recognized under this plan was CHF 123 million for the year ended December 31, 2002.

The old Swiss ESOP 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 2002, the Group sold 406 448 shares (2001: 862 720 shares) to employees for CHF

20 million (2001: CHF 46 million). The discount to the Group's share price was recorded in share premium. The percentage discount to the Group's share price under this plan was 75% in 2002 (2001: 88%). 2002 was the last year in which employees could purchase shares under this scheme. Employees, who join Novartis after January 1, 2002, will participate in the new ESOP only.

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 for this plan was CHF 3 million for 2002 (2001: CHF 37 million). This plan was supplemented in 2001 by the US ADS Incentive Plan.

The total US GAAP expense of the above items is as follows:

	2002 CHF millions	2001 CHF millions
Long-term performance plan	22	11
Leveraged Share Savings plan	17	17
Other Management Share plans	6	1
New Swiss ESOP plan	123	
Old Swiss ESOP plan	20	46
ADS Appreciation Cash plan	-3	-37
Total US GAAP additional compensation expense	**185**	**38**

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 31 million and CHF 37 million in 2002 and 2001, respectively. US GAAP equity at December 31, 2002 and 2001 decreases by CHF 686 million and CHF 939 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 2002 IPR&D has been identified for US GAAP purposes in connection with acquisitions, principally the acquisition of a further 11.4% of the voting shares of Roche and of 99% of the shares of Lek.

A fair value determination of Roche was used to determine the CHF 191 million of IPR&D which was 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.

Because the Lek transaction closed and was effective near the end of 2002, an estimated CHF 130 million of IPR&D was expensed immediately. Based on a preliminary evaluation of available information, this represents the best estimate. Management's evaluation along with the fair value determination by independence appraisers, scheduled for completion in the first quarter of 2003, could result in an adjustment to this estimate.

IPR&D recognized on other acquisitions amounted to CHF 25 million in 2002.

The income booked for the reversal of the amortization of IPR&D recorded under IAS as a component of goodwill amortization amounted to CHF 330 million in 2002. The total net IPR&D expense for 2002 was CHF 16 million (2001: CHF 936 million). During 2001 IPR&D arose principally on the acquisition of the Roche voting shares (CHF 356 million) and the purchase of pitavastatin marketing rights (CHF 506 million).

The impact of IPR & D reduced US GAAP equity by CHF 1 380 million and CHF 1 392 million at December 31, 2002 and 2001, respectively.

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:

(i) 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.

(ii) Cash, cash equivalents and time deposits

	2002 CHF millions	2001 CHF millions
Carrying value of cash and cash equivalents under IAS	8 138	11 147
Carrying values of time deposits under IAS (note 16)	1 076	2 689
Change due to consolidation of share-based compensation foundation under US GAAP	-872	-1 137
Total under US GAAP	**8 342**	**12 699**

(iii) Marketable securities

	2002 CHF millions	2001 CHF millions
Carrying values of marketable securities under IAS (note 16)	7 715	8 008
Carrying values of other investments under IAS	1 257	1 755
Marketable securities in share-based compensation foundation consolidated under US GAAP	181	196
Total under US GAAP	**9 153**	**9 959**

The components of available-for-sale marketable securities under US GAAP at December 31, 2002 and 2001 are the following:

	Cost CHF millions	Gross unrealized gains CHF millions	Gross unrealized losses CHF millions	Carrying value and estimated fair value CHF millions
As at December 31, 2002				
Available-for sale-securities:				
Equity securities	2 838	297	-801	2 334
Debt securities	6 733	128	-42	6 819
Total	**9 571**	**425**	**-843**	**9 153**
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**

Proceeds from sales of available-for-sale securities were CHF 9 433 million and CHF 9 482 million in 2002 and 2001, respectively. Gross realized gains were CHF 412 million and CHF 795 million on those sales in 2002 and 2001, respectively. Gross realized losses were CHF 1 004 million and CHF 170 million on those sales in 2002 and 2001, 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, 2002 are as follows:

	2002 CHF millions
Within one year	139
Over one year through five years	5 488
Over five years through ten years	413
Over ten years	779
Total	**6 819**

(iv) Derivative financial instruments: Total gains recognized in 2002 in accordance with US GAAP on options settled in Novartis shares that require a net cash settlement were CHF 190 million (2001: CHF 387 million of losses).

(v) Non-derivative financial instruments: The US GAAP carrying values are equivalent to the IAS carrying values for all non-derivative financial assets and liabilities. Non-derivative financial assets consist of cash and cash equivalents, time deposits, and marketable securities. Non-derivative 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 20 to the IAS consolidated financial statements.

(vi) 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:

	2002	2001
Net income under		
US GAAP (CHF millions)	**5 905**	**4 703**
Weighted average number of shares		
in issue under IAS	2 515 311 685	2 571 673 365
Weighted average number of treasury		
shares due to consolidation of the		
employee share participation		
foundation under US GAAP	-97 164 490	-100 569 059
Weighted average number of shares		
in issue under US GAAP	**2 418 147 195**	**2 471 104 306**
Basic earnings per share under		
US GAAP (CHF)	**2.44**	**1.90**

	2002	2001
Net income		
under US GAAP (CHF millions)	5 905	4 703
Elimination of interest expense on		
convertible debt (net of tax effect)	3	20
Net income used to determine		
diluted earnings per share	**5 908**	**4 723**
Weighted average number of shares		
in issue under IAS	2 515 311 685	2 571 673 365
Adjustment for assumed conversion		
of convertible debt		9 478 158
Call options on Novartis shares	54 891 036	4 574 401
Adjustment for other dilutive		
share options	2 264 236	1 010 963
Weighted average number of treasury		
shares due to consolidation of the		
employee share participation		
foundation under US GAAP	-97 164 490	-100 569 059
Weighted average number of shares		
for diluted earnings per share		
under US GAAP	**2 475 302 467**	**2 486 167 828**
Diluted earnings per share under		
US GAAP (CHF)	**2.39**	**1.90**

(vii) Pro forma earnings per share: Statement of Financial Accounting Standards No. 123 (SFAS 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:

	2002	2001
Net income under US GAAP (CHF millions):		
As reported	5 905	4 703
Pro forma	5 760	4 664
Earnings per share (CHF):		
As reported:		
Basic	2.44	1.90
Diluted	2.39	1.90
Pro forma:		
Basic	2.38	1.89
Diluted	2.33	1.88

The weighted average assumptions used in determining the fair value of option grants were as follows:

	2002	2001
Dividend yield	1.8%	1.2%
Expected volatility	24.0%	24.0%
Risk-free interest rate	4.0%	4.0%
Expected life	9 yrs	9 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.

(viii) Deferred tax: The deferred tax asset less valuation allowance at December 31, 2002 and 2001 comprises CHF 1 507 million and CHF 2 206 million of current assets and CHF 884 million and CHF 1 029 million of non-current assets, respectively. The deferred tax liability at December 31, 2002 and 2001 comprises CHF 1 339 million and CHF 823 million of current liabilities and CHF 4 503 million and CHF 3 062 million of non-current liabilities respectively.

(ix) 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	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Plan assets at fair value				
January 1	**23 361**	**25 426**		
Actual return on plan assets	-1 646	-737		
Foreign currency translation	-626	49		
Employer contributions	116	109		
Employee contributions	9	33		
Plan amendments	16	-361		
Benefit payments	-1 066	-1 158		
Plan assets at December 31	**20 164**	**23 361**		
Benefit obligation				
January 1	**18 616**	**17 662**	**846**	**660**
Service cost	389	359	19	15
Interest cost	774	825	51	52
Actuarial (gain) loss	-1 556	1 379	184	169
Plan amendments	17	-437	-3	-2
Foreign currency translation	-548	-14	-138	15
Benefit payments	-1 066	-1 158	-53	-63
December 31	**16 626**	**18 616**	**906**	**846**
Funded status	**3 538**	**4 745**	**-906**	**-846**
Unrecognized actuarial (gain) loss	2 052	632	141	-58
December 31 – Prepaid (accrued) benefit costs	**5 590**	**5 377**	**-765**	**-904**
Prepaid benefit costs	6 603	6 469		
Accrued benefit liability	-1 013	-1 092	-765	-904
December 31 – Net amount recognized in the balance sheet	**5 590**	**5 377**	**-765**	**-904**

	Pension benefits		Other post-employment benefits	
	2002 CHF millions	2001 CHF millions	2002 CHF millions	2001 CHF millions
Benefit cost				
Service cost	389	359	19	15
Interest cost	774	825	51	52
Expected return on plan assets	-1 362	-1 517		
Employee contributions	-9	-33		
Amortization of actuarial (gain) loss	-14	258	-6	78
Net periodic benefit (income) cost	**-222**	**-108**	**64**	**145**
Weighted-average assumptions as at December 31	**%**	**%**	**%**	**%**
Discount rate	4.5	4.6	6.8	7.5
Rate of payroll indexation	2.8	2.8		
Expected return on plan assets	6.1	6.1		

In 2001 the Group recorded CHF 108 million of settlement gains associated with Group restructurings.

The assumed health care cost trend rate at December 31, 2002 was 10%, decreasing to 4.75% in 2010. The assumed health care cost trend rate at December 31, 2001 was 9%, decreasing to 4.75% in 2006 and thereafter. A one-percentage-point change in the assumed health care cost trend rates compared to those used for 2002 would have the following effects:

	1% point increase CHF millions	1% point decrease CHF millions
Effects on total of service and interest cost components	11	-9
Effect on post-employment benefit obligations	108	-93

(x) 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.

(xi) Adoption of SFAS 142: On January 1, 2002, the Group adopted the provisions of Statement of Financial Accounting Standards No. 142, "*Goodwill and Other Intangible Assets*" (SFAS 142).

Under the provisions of SFAS 142, intangible assets with indefinite lives and goodwill are no longer amortized but are subject to annual impairment tests. Separable intangible assets with definite lives continue to be amortized over their useful lives. Goodwill is the only intangible asset within the Group which is not subject to amortization under US GAAP.

The changes in the carrying amount of goodwill for the year ended December 31, 2002 are as follows:

	Pharmaceuticals Division CHF millions	Consumer Health Division CHF millions	Total CHF millions
January 1, 2002	**760**	**6 747**	**7 507**
Additions		790	790
Impairment losses	-607	-55	-662
Goodwill written off related to disposal of businesses		-62	-62
Translation effects	-56	-1 008	-1 064
December 31, 2002	**97**	**6 412**	**6 509**

All goodwill components were tested for impairment during 2002. The fair values of the businesses were determined using the expected present values of future cash flows.

Under IAS the Group recorded goodwill impairments of CHF 369 million as explained in Note 9.

Under SFAS 142, the Group recorded additional write-downs of CHF 293 million related mainly to the Pharmaceutical Division research and biotechnology activities of Systemix Inc., and Consumer Health Division goodwill relating to the Medical Nutrition and OTC business units. The goodwill of these activities was historically higher under US GAAP than IAS.

Pro forma net income:

	Dec 31, 2002 CHF millions	Dec 31, 2001 CHF millions
Reported net income	5 905	4 703
Add back: Goodwill amortization		315
Pro forma net income	5 905	5 018

Basic earnings per share:

	Dec 31, 2002 CHF	Dec 31, 2001 CHF
Reported basic EPS	2.44	1.90
Goodwill amortization		0.12
Adjusted basic EPS	2.44	2.02

Diluted earnings per share:

	Dec 31, 2002 CHF	Dec 31, 2001 CHF
Reported diluted EPS	2.39	1.90
Goodwill amortization		0.12
Adjusted diluted EPS	2.39	2.02

The Group estimates that the aggregate amortization expense for intangibles subject to amortization for each of the five succeeding financial years will not materially differ from the current aggregate amortization expense.

(xii) 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.

(xiii) Effect of New Accounting Pronouncements: US GAAP: Statement of Financial Accounting Standards SFAS 145 on *"Rescission of FASB Statements No. 4, 44, and 64, Amendment of FASB Statement No. 13, and Technical Corrections as of April 2002"* and SFAS 146 on *"Accounting for Costs Associated with exit or Disposal Activities"* will become effective for periods beginning on or after January 1, 2003. These new standards are not expected to have any material impact on the Group's consolidated financial statements.

FASB interpretation No. 45 *"Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others",* was issued in November 2002. This Interpretation provides further guidance for the disclosure and accounting for guarantees. The disclosure provisions have been adopted for the year ended December 31, 2002. In accordance with the Interpretation, all guarantees entered into after December 31, 2002 are required to be recognized as a liability at fair value. This new Interpretation is not expected to have a material impact on the Group's consolidated financial statements.

Report of the Auditors on the Novartis Group Consolidated Financial Statements

PRICEWATERHOUSECOOPERS

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, 2002.

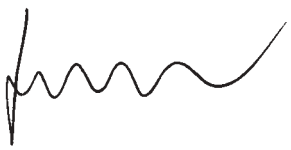
These consolidated financial statements are the responsibility of the Board of Directors. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We confirm that we meet the legal requirements concerning professional qualification and independence.

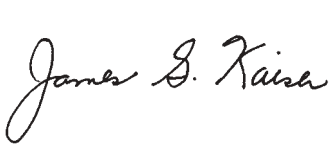
Our audit was conducted in accordance with auditing standards promulgated by the Swiss profession and with International Standards on Auditing, which require that an audit be planned and performed to obtain reasonable assurance about whether the consolidated financial statements are free from material 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.A.J. Bachmann J.G. Kaiser

Basel, January 21, 2003

Financial Statements of Novartis AG

Income Statements

(for the years ended December 31, 2002 and 2001)

	2002 CHF millions	2001 CHF millions
Income		
Income from financial assets	5 779	3 215
Income from marketable securities, cash and short-term deposits	261	287
Gain from divestment of subsidiaries	103	22
Gain from disposal of intangible assets	215	313
License fees from subsidiaries	384	332
Other income	28	1
Total income	**6 770**	**4 170**
Expenses		
Financial expenses	-94	-101
Administrative expenses	-6	-3
Changes to provisions and value of financial assets	-14	-18
Other expenses	-16	-2
Taxes	-62	-111
Total expenses	**-192**	**-235**
Net income	**6 578**	**3 935**

Proposal for the Appropriation of Available Earnings

	2002 CHF	2001 CHF
Available unappropriated earnings		
Balance brought forward	-	-
Waived dividend on treasury shares		56 441 360
Net income of the year	6 577 671 070	3 934 800 324
Total available earnings	**6 577 671 070**	**3 991 241 684**
Appropriation		
Payment of a dividend of CHF 0.95 (2001: CHF 0.90) gross on 2 547 080 981 (2001: 2 619 690 320)		
dividend bearing shares with a nominal value of CHF 0.50 each	-2 419 726 932	-2 357 721 288
Transfer to free reserves	-4 157 944 138	-1 633 520 396
Balance to be carried forward	**-**	**-**

Balance Sheets (prior to profit appropriation)

(at December 31, 2002 and 2001)

	Notes	2002 CHF millions	2001 CHF millions
Assets			
Financial assets	3	12 541	12 519
Total long-term assets		**12 541**	**12 519**
Current assets			
Receivables from			
– subsidiaries		3 340	1 037
– others		124	125
Marketable securities	4	2 269	4 739
Cash and short-term deposits		200	4
Total current assets		**5 933**	**5 905**
Total assets		**18 474**	**18 424**
Equity and liabilities			
Equity			
Total share capital	5	**1 412**	**1 443**
Reserves			
Legal reserves	6		
General reserve		289	289
Reserve for treasury shares		9 321	8 568
Free reserves	7	34	3 122
Total reserves		**9 644**	**11 979**
Unappropriated earnings			
Balance brought forward due to waived dividends on treasury shares			56
Net income of the year		6 578	3 935
Total unappropriated earnings		**6 578**	**3 991**
Total equity		**17 634**	**17 413**
Liabilities			
Provisions		709	729
Accounts payable and accrued liabilities			
– subsidiaries		53	63
– others		78	219
Total liabilities		**840**	**1 011**
Total equity and liabilities		**18 474**	**18 424**

The notes form an integral part of these unconsolidated financial statements

1. Introduction

The financial statements of Novartis AG comply with the requirements of the Swiss law for companies, the Code of Obligations (SCO).

2. Accounting policies

Exchange rate differences: Current assets 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 10 009 million (2001: CHF 9 972 million) of investments in subsidiaries and CHF 2 532 million (2001: CHF 2 547 million) of loans to subsidiaries and other related entities.

The principal direct and indirect subsidiaries, and other holdings of Novartis AG are shown on pages 138 and 139.

4. Marketable securities

Included in marketable securities are treasury shares with a net book value of CHF 2 230 million (2001: CHF 4 703 million) (see 5 and 6 below).

5. Share capital

	Number of shares					
	Dec 31, 2000	Dec 31, 2000 restated after share split	Movement in year	Dec 31, 2001	Movement in year	Dec 31, 2002
Total Novartis AG shares	**72 130 117**	**2 885 204 680**		**2 885 204 680**	**-61 054 680**	**2 824 150 000**
Treasury shares						
Treasury shares held by Novartis AG	3 295 700	131 828 000	59 154 300	190 982 300	-36 474 300	154 508 000
Treasury shares held by subsidiaries	1 780 792	71 231 680	1 400 000	72 631 680	49 929 339	122 561 019
Total treasury shares	**5 076 492**	**203 059 680**	**60 554 300**	**263 613 980**	**13 455 039**	**277 069 019**

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 reduced from CHF 1 442.6 million at December 31, 2001 to CHF 1 412.1 million at December 31, 2002 due to a share capital reduction and subsequent cancellation of 61 054 680 shares with a nominal value of CHF 30 527 340 approved at the Annual General Meeting of March 21, 2002 which became effective on July 8, 2002. Treasury share purchases totaled 85.5 million with an average purchase price per share of CHF 64 (2001: CHF 66) and treasury share

5. Share capital (continued)

sales totaled 11.0 million with an average sales price per share of CHF 54.

The number of treasury shares held by the Company and subsidiaries meet the definitions and requirements of Art. 659b SCO.

The 277 069 019 treasury shares held at December 31, 2002 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 SCO.

6. Legal reserve

General reserve

	2002 CHF millions	2001 CHF millions
January 1 and December 31	**289**	**289**

Reserve for treasury shares held by the Group

	2002 CHF millions	2001 CHF millions
January 1	**8 568**	**4 586**
Reduction due to cancellation of treasury shares (CHF 4 billion of repurchased shares less their nominal value of CHF 31 million)	-3 969	
Transfer from free reserves	4 722	3 982
December 31	**9 321**	**8 568**

The general reserve amounts to 20% of the share capital of Novartis AG at the beginning of the year which is the minimum amount required by the SCO.

Novartis AG has met the legal requirements for legal reserves under Articles 659 et. seq. and 663b.10 SCO for treasury shares detailed in note 5.

7. Free reserves

	2002 CHF millions	2001 CHF millions
January 1	**3 122**	**6 322**
Transfer from unappropriated earnings	1 634	782
Transfer to reserve for treasury shares	-4 722	-3 982
December 31	**34**	**3 122**

8. Contingent liabilities

	Outstanding liabilities Dec 31, 2002 CHF millions	Outstanding liabilities Dec 31, 2001 CHF millions
Guarantees to cover capital and interest of bonds, commercial paper and the Euro medium-term note program – total maximum amount CHF 7 290 million (2001: CHF 7 037 million)	4 889	4 451
Guarantees in connection with options on Novartis AG shares[1] total maximum amount CHF 4 239 million (2001: CHF 4 088 million)	4 239	4 088
Guarantees in favor of group companies, associated companies and others – total maximum amount CHF 622 million (2001: CHF 1 950 million)	331	1 289
Total	**9 459**	**9 828**

[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, 2002	% holding of share capital December 31, 2001
Emasan AG, Basel	3.1	3.8
Novartis Foundation for Employee Participation, Basel	3.3	3.5

Report of the Auditors on the Novartis AG Financial Statements

PRICEWATERHOUSECOOPERS

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, 2002.

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 21, 2003

Key Dates for 2003

Anticipated key reporting dates	
Annual General Meeting for the financial year 2002	March 4, 2003
First Quarter 2003 (sales and results)	April 15, 2003
First Half 2003 (sales and results)	July 21, 2003
Third Quarter 2003 (sales and results)	October 20, 2003
Full Year 2003 (sales and results)	January 2004

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Novartis on the Internet
http://www.novartis.com

Novartis Annual Report on the Internet
http://www.novartis.com/annualreport2002

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 business segments 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 Annual 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 Group, 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 Annual 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.

 The business policy of Novartis takes into account the OECD's Guidelines for Multinational Enterprises, with their recommendations on the disclosure of information.

Our Annual Report is originally published in English, with French and German versions available.

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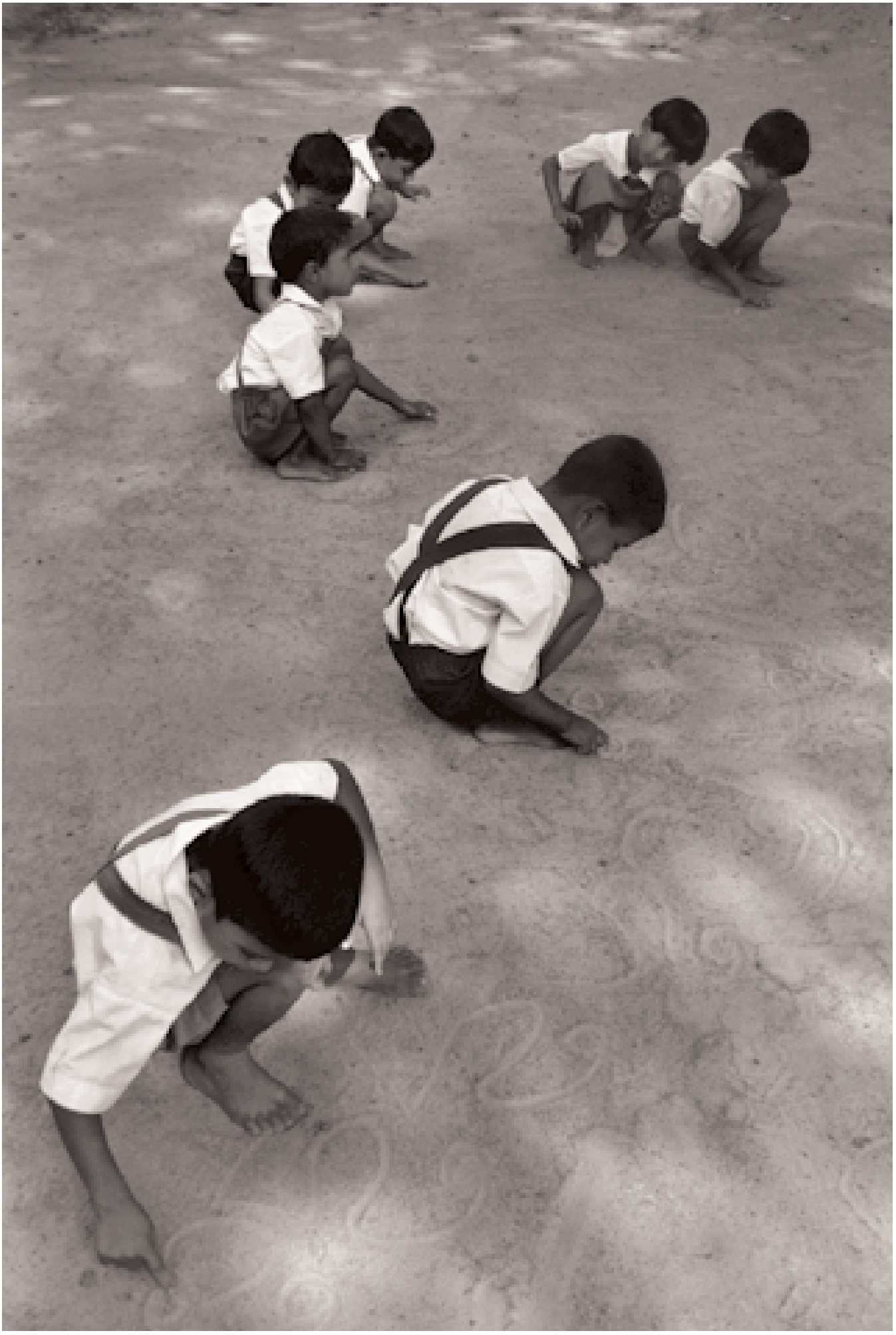
We wish to extend our thanks to Martine Franck for the wonderful and very moving photographs used in this report.

Equally, we would like to thank everyone who contributed to this report by sharing personal experience and knowledge with us.



…writing in sand…

Sarvodaya Pre-School, Paluchera, Sri Lanka