NOVARTIS AG
Form 20-F
January 30, 2004

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As filed with the Securities and Exchange Commission on January 30, 2004

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington D.C. 20549

FORM 20-F

o REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the fiscal year ended December 31, 2003

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-15024

NOVARTIS AG

(Exact name of Registrant as specified in its charter)

NOVARTIS Inc.

(Translation of Registrant's name into English)

Switzerland

(Jurisdiction of incorporation or organization)

Lichtstrasse 35
4056 Basel, Switzerland

(Address of principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

Title of class	Name of each exchange on which registered
American Depositary Shares each representing 1 share, nominal value CHF 0.50 per share, and shares	**New York Stock Exchange, Inc.**

Securities registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

2,467,768,660 shares

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes ý No o Not Applicable

Indicate by check mark which financial statement item the Registrant has elected to follow:

Item 17 o Item 18 ý

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INTRODUCTION AND USE OF CERTAIN TERMS

Novartis AG and our consolidated affiliates ("Novartis" or the "Group") publish consolidated financial statements expressed in US dollars. Our consolidated financial statements found in Item 18 of this annual report on Form 20-F ("Form 20-F") are those for the year ended

December 31, 2003. In this Form 20-F, references to "US dollars", "US$" or "$" are to the lawful currency of the United States of America; and references to "CHF" are to Swiss francs.

In this Form 20-F, references to the "United States" or to "US" are to the United States of America, references to "Europe" are to all European countries (including Turkey, Russia and the Ukraine), references to the European Union ("EU") are to each of the 15 member-states of the EU and references to "Americas" are to North, Central (including the Caribbean) and South America, unless the context otherwise requires; references to "Novartis" or the "Group" are to Novartis AG and its consolidated affiliates; references to "associates" are to employees of our affiliates; references to the "FDA" are to the US Food and Drug Administration. All product names appearing in italics are trademarks of Group companies. Product names identified by a "®" or a " " are trademarks of other companies. You will find the words "we," "our," "us" and similar words or phrases in this Form 20-F. We use those words to comply with the requirement of the US Securities and Exchange Commission to use "plain English" in public documents like this Form 20-F. For the sake of clarification, each operating company in the Group is legally separate from all other companies in the Group and manages its business independently through its respective board of directors or other top local management body. No Group company operates the business of another Group company nor is any Group company the agent of any other Group company. Each executive identified in this Form 20-F reports directly to other executives of the company by whom the executive is employed, or to that company's board of directors.

We furnish to holders of our registered shares ("shares") annual reports that include a description of operations and annual audited consolidated financial statements prepared in accordance with International Financial Reporting Standards ("IFRS"). IFRS differs in certain significant respects from Generally Accepted Accounting Principles in the United States ("US GAAP"). See "Item 18. Financial Statements note 32" for a description of the significant differences between IFRS and US GAAP. The financial statements included in the annual reports are examined and reported upon by our independent auditors. We make available to our shareholders, on our web page, quarterly interim press releases that include unaudited interim consolidated financial information prepared in conformity with IFRS with a reconciliation to US GAAP.

FORWARD-LOOKING STATEMENTS

This Form 20-F contains certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, relating to our business and the industries in which we operate. Certain forward-looking 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 the negative thereof or other variations thereof or comparable terminology, or by discussions of strategy, plans or intentions. Such statements include descriptions of our investment and research and development programs and anticipated expenditures in connection therewith, and descriptions of new products we expect to introduce and anticipated customer demand for such products. Such statements 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 such forward-looking statements. Some of these factors are discussed in more detail herein, including under "Item 3. Key Information 3.D. Risk factors," "Item 4. Information on the Company," and "Item 5. Operating and Financial Review and Prospects." 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 Form 20-F as anticipated, believed, estimated or expected. We do not intend, and do not assume any obligation, to update any information or forward-looking statements set out in this Form 20-F.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

3.A Selected Financial Data

The selected financial information set out below has been extracted from our consolidated financial statements. Our consolidated financial statements ("consolidated financial statements") for the years ended December 31, 2003, 2002 and 2001 are included elsewhere in this Form 20-F. All financial data should be read in conjunction with "Item 5. Operating and Financial Review and Prospects" and our consolidated financial statements and accompanying notes which are included elsewhere in this Form 20-F. All financial data presented in this Form 20-F are qualified in their entirety by reference to the consolidated financial statements and such notes. We began presenting our results in US dollars effective as of January 1, 2003, and we have restated financial information for prior years into US dollars for comparison purposes.

The consolidated financial statements used to create the selected consolidated financial data set forth below were prepared in accordance with IFRS. IFRS differs in certain respects from US GAAP. For a discussion of the significant differences between IFRS and US GAAP, see "Item 18. Financial Statements note 32."

	Year Ended December 31,						
	2003	**2002**	**2001**	**2000**	**2000[1]**	**1999**	**1999[1]**
	($ millions, except per share information)						
INCOME STATEMENT DATA							
Amounts in accordance with IFRS:							
Net sales	**24,864**	**20,877**	**18,762**	**20,997**	**16,986**	**21,496**	**16,778**
Operating income	**5,889**	**5,092**	**4,325**	**4,684**	**4,000**	**4,868**	**4,437**
Result from associated companies	(200)	(7)	83	58	57	255	250
Net financial income	379	613	284	187	261	531	662
Income before taxes and minority interests	**6,068**	**5,698**	**4,692**	**4,929**	**4,318**	**5,654**	**5,349**
Taxes	(1,008)	(959)	(844)	(1,082)	(895)	(1,235)	(1,135)
Minority interests	(44)	(14)	(12)	(25)	(15)	(18)	(13)
Net income	**5,016**	**4,725**	**3,836**	**3,822**	**3,408**	**4,401**	**4,201**
Basic earnings per share in $[2]	2.03	1.88	1.49	1.46	1.30	1.66	1.58
Diluted earnings per share in $[2]	2.00	1.84	1.49	1.46	1.30	1.66	1.58
Cash dividends[3]	1,724	1,367	1,268	1,259		1,215	
Cash dividends per share in CHF[4]	1.00	0.95	0.90	0.85		0.80	
Operating income from continuing operations per share:							
basic earnings per share in $[2]	2.38	2.02	1.68	1.79	1.53	1.83	1.67
diluted earnings per share in $[2]	2.35	1.98	1.68	1.79	1.53	1.83	1.67

(1) Financial data presented on a continuing basis, excluding the results of the Agribusiness Division, which was spun-off in 2000.

(2) Basic and Diluted earnings and cash dividends per share have been adjusted to reflect a forty-for-one share split effective May 7, 2001. The years 2000 and 1999 have been adjusted to take this split into account, in order to provide per share information on a consistent basis.

(3)

Cash dividends represent cash payments in the applicable year that generally relate to earnings of the previous year.

(4) Cash dividends per share represent dividends proposed that relate to earnings of the current year. Dividends for 2003 will be proposed to the Annual General Meeting on February 24, 2004 for approval.

	Year Ended December 31,				
	2003	2002	2001	2000	1999
	($ millions, except per share data)				
BALANCE SHEET DATA					
Amounts in accordance with IFRS:					
Cash, cash equivalents and current marketable securities	13,259	12,542	13,193	12,659	10,250
Inventories	3,346	2,963	2,449	2,515	4,323
Other current assets	5,668	5,310	4,712	4,923	7,196
Long-term assets	27,044	24,210	19,408	15,410	19,365
Total assets	**49,317**	**45,025**	**39,762**	**35,507**	**41,134**
Trade accounts payable	1,665	1,266	1,077	971	1,237
Other current liabilities	7,655	7,006	7,378	6,131	9,694
Long-term liabilities and minority interests	9,568	8,484	6,146	5,914	6,841
Total equity	30,429	28,269	25,161	22,491	23,362
Total liabilities and equity	**49,317**	**45,025**	**39,762**	**35,507**	**41,134**
Net assets	30,449	28,355	25,223	22,538	23,501
Outstanding share capital	896	898	925	946	953
Amounts in accordance with US GAAP:					
Income statement data					
Net income	3,788	3,829	2,419	3,794	3,615
Basic earnings per share[1]	1.59	1.58	0.98	1.51	1.40
Diluted earnings per share[1]	1.57	1.55	0.98	1.50	1.40
Balance sheet data					
Total equity	34,878	33,225	30,208	29,840	31,748
Total assets	54,048	50,361	45,105	43,976	50,067

(1) Earnings per share have been adjusted to reflect a forty-for-one share split effective May 7, 2001. 2000 and 1999 figures have been adjusted to take this split into account, in order to provide earnings per share information on a consistent basis.

Cash Dividends per Share

Cash dividends are translated into US dollars at the Reuters Market System Rate on the payment date. Because we pay dividends in Swiss francs, exchange rate fluctuations will affect the US dollar amounts received by holders of ADSs.

Year Earned	Month and Year Paid	Total Dividend[2] per share	Total Dividend[4] per ADS
		(CHF)	($)

Year Earned	Month and Year Paid	Total Dividend[2] per share	Total Dividend[4] per ADS
1999	April 2000	0.80	0.41
2000	April 2001	0.85	0.43
2001	March 2002	0.90	0.54
2002	March 2003	0.95	0.68
2003[1][3]	February 2004	1.00	0.80

(1) If the Swiss franc amount for 2003 is translated into US dollars at the rate of CHF 1.25 to the dollar, the Total Dividend per share and Total Dividend per ADS in US dollars would be $0.80. Such translation should not be construed as representations that the Swiss franc amount represent, or have been or could be converted into, US dollars at that or any other rate.
(2) 1999 and 2000 figures have been adjusted for a forty-for-one share split and share-to-ADS ratio change on May 7, 2001.
(3) Dividend to be proposed at the Annual General Meeting on February 24, 2004.
(4) 1999 figures have been adjusted for a two-for-one split for the ADSs on May 11, 2000.

Exchange Rates

The following table shows, for the years and dates indicated, certain information concerning the rate of exchange of Swiss francs per US dollar based on exchange rate information found on Reuters Market System. The exchange rate in effect on January 27, 2004, as found on Reuters Market System, was CHF 1.26 = $1.00.

Year ended December 31,	Period End	Average[1]	High	Low
1999	1.59	1.51	1.60	1.36
2000	1.64	1.69	1.83	1.55
2001	1.68	1.69	1.82	1.58
2002	1.40	1.55	1.72	1.39
2003	1.25	1.34	1.42	1.24
Month end,				
August 2003			1.42	1.34
September 2003			1.42	1.32
October 2003			1.34	1.31
November 2003			1.38	1.30
December 2003			1.30	1.24
January 2004[2]			1.27	1.22

(1) Represents the average of the exchange rates on the last day of each full month during the year.
(2) The high and low US dollar/Swiss Franc exchange rate is current as of January 27, 2004.

3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the offer and use of proceeds

Not applicable.

3.D Risk factors

You should carefully consider all of the information set forth in this Form 20-F and the following risk factors which we face and which are faced by our industry. The risks below are not the only ones we face. Additional risks not currently known to us or that we presently deem immaterial may also impair our business operations. Our business, financial condition or results of operations could be materially adversely

affected by any of these risks. This Form 20-F also contains forward-looking statements that involve risks and uncertainties. Our results could materially differ from those anticipated in these forward-looking statements as a result of certain factors, including the risks we face as described below and elsewhere. See "Forward-Looking Statements" on page 1.

We face intense competition from new products.

Our products face intense competition from competitors' products. This competition may increase as new products enter the market. In such an event, our competitors' products may be safer or more effective or more effectively marketed and sold than our products. If we fail to maintain our competitive position, this could have a material adverse effect on our business and results of operations.

Our research and development efforts may not succeed.

In order to remain competitive, we must continue to launch new and better products each year. To accomplish this, we commit substantial effort, funds and other resources to research and development, both through our own dedicated resources, and on various collaborations with third parties. Our ongoing investments in new product launches and research and development for future products could produce higher costs without a proportional increase in revenues.

In the pharmaceutical business, the research and development process can take up to 12 years, or even longer, from discovery to commercial product launch. This process is conducted in various stages. During each stage there is a substantial risk that we will not achieve our goals and accordingly we may abandon a product in which we have invested substantial amounts. If we fail to continue developing commercially successful new products, or successful new indications or brand extensions for existing products, this could have a material adverse effect on our business and results of operations.

Our dependence on research and development makes it highly important that we recruit and retain high quality researchers and development specialists. We commit substantial efforts and funds to this purpose. Should we fail in our efforts, this could have a material adverse effect on our business and results of operations.

We face intense competition from lower-cost generic products.

Our Pharmaceuticals Division also faces increasing competition from lower-cost generic products after patents on our products expire. Loss of patent protection typically leads to a rapid loss of sales for that product and could affect future results. Patent protection is no longer available in major markets for the active ingredients used in a number of our Pharmaceuticals Division's leading products.

Neoral. Patent protection exists for the *Neoral* micro-emulsion formulation and other cyclosporin formulations through 2009 and beyond in major markets. Despite this protection, generic cyclosporin products competing with *Neoral* have entered the transplantation market segment in the US, Germany, Japan and elsewhere. We have filed patent infringement actions against manufacturers of these generic products. However, despite a finding of infringement and an award of damages against one of these manufacturers in the US, we have so far not succeeded in obtaining an injunction, or a final judgment of damages, against any of the manufacturers we have sued.

Sandostatin. Basic patent protection for *Sandostatin SC* has expired in the US, Japan, Germany and the UK, and it will expire in 2006 in France and 2007 in Italy. However, patent protection extending to 2010 (and 2013 and beyond in the US) continues in major markets for *Sandostatin LAR*, which represents a significant and growing proportion of our octreotide sales.

Lotrel/Cibacen/Lotensin/Cibadrex. The basic benazepril substance patent protection for *Cibacen/Lotensin/Cibadrex* expired in Japan in 2002 and will expire in the US in February 2004, and in 2004-08 in major markets in the EU. However, *Lotrel,* which is a combination of benazepril and amlodipine besylate, is patented in the US until 2017. Dr. Reddy's Laboratories has challenged this patent, as well as other patents related to *Lotrel,* in a lawsuit filed in December 2003. Dr. Reddy's is seeking marketing approval for a different benazepril combination, using amlodipine maleate, rather than amlodipine besylate. Because of this difference, the Dr. Reddy's product, if brought to market, would not be automatically substitutable in the US for *Lotrel*. Nonetheless, we will take all appropriate measures to enforce our patent rights.

Lamisil. The active ingredient in *Lamisil* is covered generically by a patent family which will expire in July 2004 in the US, and which has expired in other major countries. Another patent family covers the active ingredient specifically and expires in the US in 2006, and 2004-07 in Japan and major EU countries. The specific US patent is being challenged by Dr. Reddy Laboratories in the US.

Miacalcin/Miacalcic. The specific Novartis formulation of this product is covered by patents which will expire in the US in 2015. However, patents on the Novartis formulation expired in a number of other major countries in 2003, and will expire in Italy in 2006. Apotex has applied to the FDA for the right to sell a generic version of *Miacalcin*, using the Novartis formulation. We have sued Apotex for infringement. Another company has applied to the FDA for the right to sell a generic version of *Miacalcin* based on a different formulation. We have not sued this company.

Voltaren. *Voltaren* is off-patent. As a result, revenue from *Voltaren* has declined, and may decline significantly further over the next few years.

Government regulation may adversely affect our business.

Like our competitors, we are subject to strict government controls on the development, manufacture, marketing, labeling, distribution and pricing of our products. We must obtain and maintain regulatory approval for our pharmaceutical and many of our other products from regulatory agencies in order to sell our products in a particular jurisdiction.

Risks regarding the development of new products. Our research and development activities are heavily regulated. If we fail to comply fully with applicable regulations, then there could be a delay in the submission or approval of potential new products for marketing approval. In addition, the submission of an application to a regulatory authority does not guarantee that a license to market the product will be granted. Each authority may impose its own requirements and delay or refuse to grant approval, even when a product has already been approved in another country. In our principal markets, the approval process for a new product is complex, lengthy and expensive. The time taken to obtain approval varies by country but generally takes from six months to several years from the date of application. This registration process increases the cost to us of developing new products and increases the risk that we will not succeed in selling them successfully.

Risks regarding the manufacture of our products. The manufacture of our products is heavily regulated by governmental authorities around the world, including the FDA. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. A failure to comply fully with such regulations could also lead to a delay in the approval of new products.

Risks regarding the marketing of our products. The marketing of our products is also heavily regulated by governments throughout the world. In many countries, particularly those in Europe, we are prohibited from marketing our products directly to consumers. In the US, some direct-to-consumer marketing practices are permitted, but the scope of allowable marketing practices is still significantly limited. Most countries also place restrictions on the manner and scope of permissible marketing to physicians and other health professionals. The effect of such regulations may be to limit the amount of revenue which we may be able to derive from a particular product. In addition, if we fail to comply fully with such regulations then civil or criminal actions could be brought against us.

Risks regarding the pricing of our products. In addition to normal price competition in the marketplace, the prices of our pharmaceutical products are restricted by price controls imposed by governments and health care providers in most countries. Price controls operate differently in different countries and can cause wide variations in prices between markets. Currency fluctuations can aggravate these differences. The existence of price controls can limit the revenues we earn from our products and may have an adverse effect on our business and results of operations.

United States. In the US, ongoing political debates over prescription drug pricing and recent Medicare reform legislation could increase pricing pressures. In particular, recent Medicare reform legislation could ultimately enable the US government to use its enormous purchasing power to demand discounts from pharmaceutical companies. It is not yet possible to predict with certainty the extent to which this recently-enacted legislation will affect our business and results of operations.

Europe. In Europe, our operations are subject to significant price and marketing regulations. Many governments are introducing healthcare reforms in a further attempt to curb increasing healthcare costs.

Japan. In Japan, the government generally introduces price cut rounds every other year, during which the government mandates price decreases for specific products.

Regulations favoring generics. In response to rising healthcare costs, many governments and private medical care providers, such as Health Maintenance Organizations (HMOs), have instituted reimbursement schemes that favor the substitution of generic pharmaceuticals for more expensive brand-name pharmaceuticals. In the US, generic substitution statutes have been enacted by virtually all states and permit or require the dispensing pharmacist to substitute a less expensive generic drug instead of an original branded drug.

Cross-Border Sales. Price controls in one country can also have an impact in other countries as a result of cross-border sales. In the EU, products which we have sold to customers in countries with stringent price controls can legally be re-sold to customers in other EU countries with less stringent price controls, at a lower price than the price at which the product is otherwise available in the importing country. This risk could increase in 2004, when 10 additional nations join the EU. In North America, products which we have sold to customers in Canada, which has relatively stringent price controls, are sometimes re-sold into the US, again at a lower price than the price at which the product is otherwise sold in the US. Such imports from Canada to the US are currently illegal. However, there are ongoing political efforts to change the legal status of such imports.

As a result, we expect that pressures on pricing and operating results will continue and may increase.

Risks regarding the safety and efficacy of our products. Regulatory agencies may at any time reassess the safety and efficacy of our products based on new scientific knowledge or other factors. Such reassessments could result in the amendment or withdrawal of existing approvals to market our products, which in turn would result in a loss of revenue, and could serve as an inducement to bring lawsuits against us.

Other regulatory risks. Changes in worldwide intellectual property protections and remedies, trade regulations and procedures, as well as unstable governments and legal systems, intergovernmental disputes and possible nationalization could also materially adversely affect our business or results of operations.

We operate in highly competitive and rapidly consolidating industries.

We operate in highly competitive and rapidly consolidating industries. Our principal competitors are major international corporations with substantial resources for research and development, production and marketing. Our competitors are consolidating, and the strength of combined companies could affect our competitive position in all of our business areas.

Product liability claims could adversely affect our business and results of operations.

Product liability claims are potentially a significant commercial risk for us. Substantial damage awards have been made in some jurisdictions against companies such as ours based upon claims for injuries allegedly caused by the use of their products. We are involved in a number of product liability cases claiming damages as a result of the use of our products. While we hold insurance for product liability in reasonable and prudent amounts, it is possible that not all risks may be covered by such insurance. Product liability insurance is becoming more difficult to obtain and more expensive when it is available. We believe, but do not know with certainty, that any reasonably foreseeable unaccrued costs and liabilities associated with the risks of product liability claims will either be covered by insurance, or will otherwise be in amounts which will not have a material adverse effect on our consolidated financial condition, but could be material to our results of operations in a given period.

Patent claims by third parties could adversely affect our business and results of operations.

We take all reasonable steps to ensure that our products do not infringe valid third-party intellectual property rights. Nevertheless, third parties may assert claims against us for infringement. This risk is particularly strong with respect to Sandoz, our generics Business Unit. Companies which originate branded pharmaceutical products commonly assert patent and other intellectual property rights against competitors. As a result, we can become involved in extensive litigation regarding our products. If we are unsuccessful in defending ourselves against these suits, we could be subject to injunctions preventing us from selling our products, or to damages, which may be substantial. Either event could have a material adverse effect on our consolidated financial position, results of operations or liquidity. Regarding our Sandoz Business Unit, see "Item 4. Information on the Company 4.B. Business Overview Sandoz Intellectual Property."

Our business will continue to expose us to risks of environmental liabilities.

In our product development programs and manufacturing processes, it is sometimes necessary for us to use hazardous materials, chemicals, viruses and toxic compounds. These programs and processes expose us to risks of accidental contamination, events of noncompliance with environmental laws and regulatory enforcement, personal injury, property damage and claims resulting from these events. If an accident occurred, or if we discover contamination caused by prior operations, we could be liable for cleanup obligations, damages or fines, which could have an adverse effect on our business and results of operations.

The environmental laws of many jurisdictions impose actual and potential obligations on us to remediate contaminated sites. These obligations may relate to sites:

- that we acquire, own or operate;
- that we formerly owned or operated; or
- where waste from our operations was disposed.

These environmental remediation obligations could significantly reduce our operating results. In particular, our accruals for these obligations may be insufficient if the assumptions underlying the accruals including our assumptions regarding the portion of the waste at a site for which we are responsible prove incorrect, or if we are held responsible for additional contamination.

Stricter environmental, safety and health laws and enforcement policies could result in substantial costs and liabilities to us, and could subject our handling, manufacture, use, reuse or disposal of substances or pollutants to more rigorous scrutiny than is currently the case. Consequently, compliance with these laws could result in significant capital expenditures as well as other costs and liabilities, thereby harming our business and operating results.

The manufacture of our products is technically highly complex, and a supply interruption or delay could adversely affect our business and results of operation.

The products we market, distribute and sell are either manufactured at our own dedicated manufacturing facilities, or through toll manufacturing arrangements or supply agreements with third parties. Since many of our products are the result of technically complex manufacturing processes, and are sometimes dependent on highly specialized raw materials, we can provide no assurances that supply sources will not be interrupted from time to time. In addition, for these same reasons, the volume of production of any product cannot be rapidly altered. As a result, if we should fail to accurately predict market demand for any of our products then we may not be able to produce enough of the product to meet that demand, or may produce too much of the product, either of which could affect our business and operating results.

Foreign exchange fluctuations may adversely affect our earnings and the value of some of our assets.

Through December 31, 2002, we prepared our consolidated financial statements in Swiss francs. Since January 1, 2003, we have prepared our consolidated financial statements in US dollars and have also restated consolidated financial information for prior years into US dollars. In either case, a significant portion of our earnings and expenditures are in currencies other than our reporting currency. In 2003, 43% of our sales were made in US dollars, 26% in Euro, 8% in Japanese yen, 4% in Swiss francs and 19% in other currencies. In 2003, 41% of our costs were generated in US dollars, 23% in Euro, 17% in Swiss francs, 4% in Japanese yen and 15% in other currencies. Changes in exchange rates between the US dollar and other currencies can result in increases or decreases in our costs and earnings. Fluctuations in exchange rates between the US dollar and other currencies may also affect the reported value of our assets measured and the components of shareholders' equity. We seek to minimize our currency exposure by engaging in hedging transactions where we deem it appropriate. To mitigate some of these risks, we have hedged certain foreign currency positions for 2004. We cannot predict, however, all changes in currency and interest rates, inflation or other factors, which could affect our international businesses.

Decreases in financial income could affect our earnings.

In recent years, we have earned an attractive level of financial income, net, in a difficult investment environment, due to effective currency management and investment strategies. Given the volatile nature of investment markets, there can be no guarantee that such gains will be repeated in the future, or that we can avoid suffering losses from our management of our financial assets.

Changes in accounting rules could affect our reported results.

The International Accounting Standards Board is in the process of a critical examination of current International Financial Reporting 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 Sales 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. It is not possible to predict the impact on our reported results of any such rule changes which may be made in the future, or whether such rule changes would be retrospective, potentially requiring us to restate past reported results.

Changes in tax laws could adversely affect our earnings.

Changes in the tax laws of Switzerland, the US, or other countries in which we do significant business, as well as changes in our effective tax rate for the fiscal year caused by other factors, could affect our net income. During 2003, no major tax legislation was enacted that would materially impact our net income. It is not possible to predict the impact on our results of any tax legislation which may be enacted in the future.

Changes in global economic conditions could affect our business and results of operations.

Our future results could be affected by changes in the global economy. In the recent past, terrorist attacks have had an impact on global economic conditions. Any additional terrorist attacks which may occur in the future, and any related military activity around the world, could have a similar impact, which could affect our business and results of operations.

Public pressure on the pharmaceuticals industry could affect our business and results of operations.

There is considerable public sentiment against the pharmaceuticals industry, and the industry is under the close scrutiny of the public and the media. In addition there is significant pressure on our industry from certain disadvantaged nations to make our products available to their people at drastically

lower costs. Any increase in such negative public sentiment or increase in public scrutiny or pressure from such disadvantaged nations could lead, among other things, to changes in legislation, to changes in the demand for our products, additional pricing pressures with respect to our products, or increased efforts to undercut intellectual property protections. Such changes could affect our business and results of operations.

Item 4. Information on the Company

4.A History and Development of Novartis

Novartis AG, headquartered in Basel, Switzerland, is a public company incorporated under the laws of Switzerland with an indefinite duration. We were created as a result of the merger of Sandoz AG and CIBA-Geigy AG in December 1996. Prior to the merger, Sandoz AG and CIBA-Geigy AG were each global participants in the pharmaceutical and agrochemical industries. In November 2000, we spun off our Crop Protection and Seeds businesses and merged them with AstraZeneca's Zeneca Agrochemicals to create Syngenta AG, a public company. We are domiciled in and are governed by the laws of Switzerland.

Our Group companies employ approximately 78,500 associates worldwide and operate in over 140 countries. Our registered shares are listed in Switzerland on the SWX Swiss Exchange ("SWX") and traded on the European trading platform virt-x, and our American Depositary Shares are listed on the New York Stock Exchange ("NYSE"). Our shares are also traded on International Retail Service (IRS) at the London Stock Exchange. Our registered office is located at Lichtstrasse 35, 4056 Basel, Switzerland and our telephone number is 011-41-61-324-1111. We maintain an Internet website at http://www.novartis.com. In the US, Corporation Service Company (2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, telephone: 1-800-927-9800) acts as our agent solely for the purpose of accepting service of process in respect of registration statements on Forms F-3 under the US Securities Act of 1933, as amended.

Major transactions in 2003, 2002 and 2001

On December 16, 2003, we announced that our Medical Nutrition Business Unit had entered into an agreement with Bristol-Myers Squibb Company to acquire the global adult medical nutrition business of the Bristol-Myers subsidiary Mead Johnson & Company, for $385 million in cash. This agreement is currently subject to regulatory review. See "Item 4. Information on the Company 4.B Business Overview Medical Nutrition."

On May 8, 2003, our Pharmaceuticals Division acquired a majority ownership interest in Idenix Pharmaceuticals, Inc., for an initial payment of $255 million in cash, with up to an additional $357 million in future contingent payments to the selling stockholders if Idenix achieves certain future targets. We also obtained an option to license future products from Idenix. In each case, we may pay additional amounts to Idenix in the event the applicable drug achieves certain future targets. See "Item 4. Information on the Company 4.B Business Overview Pharmaceuticals Infectious Diseases Compounds in Development."

On April 23, 2003, our Pharmaceuticals Division acquired from Pfizer Inc. an anti-incontinence product called *Enablex* in certain countries and *Emselex* in other countries. We will pay up to $225 million for the rights to this product. Part of that amount is contingent on the approval of the new drug in the US and in the EU. See "Item 4. Information on the Company 4.B Business Overview Pharmaceuticals Arthritis/Bone/Hormone Replacement Therapy/Gastrointestinal Diseases/Urinary Incontinence Compounds in Development."

On February 11, 2003, we sold the US rights to market the tension headache products *Fioricet* and *Fiorinal* to Watson Pharmaceuticals, Inc. for $178 million.

On November 29, 2002, our Sandoz Business Unit acquired more than 99% of Lek Pharmaceuticals d.d., the Slovenian generics company, for $0.9 billion in cash. In 2003, we delisted Lek from the Ljubljana Stock Exchange and acquired its remaining outstanding shares. See "Item 4. Information on the Company 4.B. Business Overview Sandoz."

On November 29, 2002, our Consumer Health Division divested its Food & Beverage business to Associated British Foods plc, of the United Kingdom, for $270 million in cash. See "Item 4. Information on the Company 4.B. Business Overview Medical Nutrition." After the sale of the Food & Beverages business to Associated British Foods plc., the remaining Health Food & Slimming and Sports Nutrition businesses were reorganized as a stand-alone unit, Nutrition & Santé, which for external reporting purposes have been consolidated into our Medical Nutrition Business Unit.

In January 2002, our Animal Health Business Unit acquired two US farm animal vaccine companies, Grand Laboratories Inc., of Iowa, and ImmTech Biologies Inc., of Kansas, for a combined minimum purchase price of $99 million, of which $78 million was settled in Novartis American Depositary Shares. The final price may increase depending on whether certain future sales and other targets are met. See "Item 4. Information on the Company 4.B. Business Overview Animal Health."

On May 5, 2001 we announced the acquisition of 32 million bearer shares of Roche Holding AG, representing 20% of the voting shares of that company for approximately $3.1 billion. These shares were purchased as a package from BZ Gruppe Holding AG and are intended as a financial investment of a potentially strategic nature. At December 31, 2001 we held 21.3% of the voting shares of Roche Holding AG, which

represented an approximate 4% interest in the total Roche equity. During 2002, we increased our investment in Roche by $1.8 billion by acquiring a further 11.4% of the company's voting shares. At December 31, 2002, we owned 32.7% of Roche's voting shares, which represented approximately 6.2% of Roche Holding AG's total shares and equity securities. During 2003, we further increased our investment in Roche by $120 million by acquiring an additional 0.6% of the company's voting shares. At December 31, 2003, we owned just under one-third of Roche's voting shares, which represents approximately 6.3% of Roche Holding AG's total shares and equity securities.

For a description of our principal capital expenditures and divestitures, see "Item 5. Operating and Financial Review and Prospects 5.B. Liquidity and Capital Resources."

General Corporate Initiatives

We have undertaken a number of initiatives designed to make our management of the Group more transparent to investors and advance our corporate citizenship ideals.

In 2003:

We were one of seven companies to launch the Business Leaders Initiative on Human Rights. This initiative seeks to better define the role of business in human rights, and to break down some of the barriers that have kept many responsible companies from realizing their role in supporting universal human rights. By participating in this initiative, we are working to strengthen human rights within the business sector through our own operations and by supporting the work of others.

We launched an international malaria education program, "*Coartem* and Malaria," developed in collaboration with the World Health Organization (WHO) in support of the effort to Roll Back Malaria. This program is intended to educate malaria victims in developing countries as to how to treat themselves with our malaria drug *Coartem*. This education program supports our novel product packaging, which has been specially designed to improve patient compliance in developing countries, optimizing drug response and cure rates. The innovative packaging incorporates a series of simple visual images that depict correct use of the six-dose regimen for infants, children and adults.

We confirmed our support for the Universal Declaration of Human Rights and announced new corporate human rights guidelines to meet our public commitments under the UN Global Compact. The new guidelines define human rights as an integral part of our policy on corporate

citizenship, and define specific principles related to equal opportunity and non-discriminatory treatment, rights of personal security and employee rights. They also set forth positions regarding respect for national sovereignty, respect for local communities and indigenous peoples, and the protection of intellectual property and technology transfer.

Our Infant & Baby Business Unit completed and shared the results of the Feeding Infants and Toddlers Study (FITS), a dietary intake survey of the eating habits and nutrient intakes of a cross-sectional, random sample of more than 3,000 US children ranging from 4 to 24 months of age. Our affiliate Gerber Products Company commissioned the survey in response to the growing obesity epidemic in the US, in order to better understand eating habits early in life when they are being formed. FITS is the largest scientific study of its kind ever conducted and fills a critical gap in knowledge. The findings, which have been published, will inform and provide insights to help health professionals develop more effective educational messages. Effective educational efforts that help parents and caregivers teach healthy eating habits early in life can help prevent obesity and chronic diseases in our next generation.

In 2002:

We became the first major pharmaceuticals company to create internal ethical guidelines regarding the use of human stem cells in research, and we established a six-member Ethics Committee, chaired by a Professor of Ethics from the Swiss Federal Institute of Technology, to monitor global compliance with these guidelines.

We introduced three changes to our Articles of Incorporation intended to enhance shareholders' rights: The deadline for submitting agenda items prior to a General Meeting of the shareholders was reduced from 60 to 45 days; shareholders were given the option of conducting electronic voting during the General Meeting; and Directors' terms of office were reduced from four to three years.

We issued Guidelines to our associates to assist them in integrating our Corporate Citizenship Policy into their daily activities.

In the US, together with other leading pharmaceutical companies, we issued the *Together Rx Card* which provides discounts on a broad range of pharmaceuticals from many manufacturers. The total volume of discounts provided by us under the *Together Rx Card* program amounted to about CHF 40 million (then worth about $26 million) in 2002. In 2003, the program's total enrollment exceeded the one million mark.

In 2001:

We created a Board-level committee to develop and implement sound corporate governance principles.

We gave the Board's Audit and Compliance Committee additional responsibility to monitor our compliance with law and policy.

We instituted a new Policy of Corporate Citizenship which sets the framework for our commitment to making corporate citizenship an integral aspect of our business.

We created a patient assistance program to help people with limited financial means to afford *Gleevec/Glivec*, our innovative oncology medication.

In collaboration with the WHO, we announced a plan to stem the spread of malaria in Africa and other endemic regions in the developing world. As part of a world-wide initiative entitled "Roll Back Malaria," we are providing specially designed packs of *Coartem*, our novel malaria treatment, for distribution through WHO at cost.

We established the Novartis Institute for Tropical Diseases in Singapore to target tropical diseases, including Dengue fever, and infections like tuberculosis.

In the US, we instituted the Novartis *CareCard* program to assist low income elderly to obtain the Novartis medications they need at significant discounts.

We split our shares 40 for 1 so that there is now a 1:1 share-to-ADS ratio.

As part of our commitment to focus not just on our business, but on the business of being a responsible member of the global community, we have continued initiatives like the Novartis Community Partnership Day where all our employees around the world are encouraged, for one day each year, to give time back to the communities in which we operate.

4.B Business Overview

General

We are a world leader both in sales and in innovation in our core businesses: pharmaceuticals and consumer health, which includes generics, OTC self-medication, animal health, medical nutrition, infant and baby foods and products, and eyecare products. We aim to hold a leadership position in all of these businesses. We are committed to improving health and well-being through innovative products and services. The name "Novartis" is derived from the Latin *novae artes*, meaning "new skills," which reflects our focus on research and development.

Product Areas and Geographic Markets

We are organized into two Divisions: Pharmaceuticals and Consumer Health. In 2002, the Consumer Health Division was reorganized to include our Sandoz generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby and CIBA Vision Business Units. The following tables set forth the Group's sales and operating income by Division or Business Unit for the years ended December 31, 2003, 2002 and 2001. Our Pharmaceuticals Division is further divided into Business Units. However, because the Pharmaceuticals Business Units have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data are not required to be separately disclosed.

	Year Ended December 31,		
	2003	**2002**	**2001**
		(in $ millions)	
Sales to third parties			
Pharmaceuticals	**16,020**	**13,528**	**11,965**
Sandoz	2,906	1,817	1,444
OTC	1,772	1,521	1,507
Animal Health	682	623	570
Medical Nutrition	815	711	661
Infant & Baby	1,361	1,333	1,319
CIBA Vision	1,308	1,135	1,059
Consumer Health ongoing	**8,844**	**7,140**	**6,560**
Divested Health & Functional Food activities		209	237
Consumer Health	**8,844**	**7,349**	**6,797**
Group sales	**24,864**	**20,877**	**18,762**
Operating income			
Pharmaceuticals	**4,423**	**3,891**	**3,377**
Sandoz	473	265	166
OTC	309	240	268
Animal Health	88	92	82
Medical Nutrition	82	4	51
Infant & Baby	254	227	230
CIBA Vision	153	118	102
Divisional Management	(39)		
Consumer Health ongoing	**1,320**	**946**	**899**
Divested Health & Functional Food activities		140	(4)

	Year Ended December 31,		
Consumer Health	**1,320**	**1,086**	**895**
Corporate and other income/expense	146	115	53
Group operating income	**5,889**	**5,092**	**4,325**

The table below sets forth a regional breakdown of certain data for the years ended December 31, 2003, 2002 and 2001.

	Americas			Europe			Asia/Africa/Australia		
	2003	**2002**	**2001**	**2003**	**2002**	**2001**	**2003**	**2002**	**2001**
	(in $ millions, except numbers of employees)								
Sales	12,036	10,558	9,666	8,788	6,832	5,992	4,040	3,487	3,104
Operating income	897	958	1,327	4,505	3,825	2,663	487	309	335
Number of employees (at December 31)	28,608	28,328	27,303	37,510	32,595	31,386	12,423	11,954	12,427
Investment in tangible fixed assets	427	537	429	846	498	332	56	33	40
Depreciation of tangible fixed assets	220	198	184	480	355	333	37	39	40
Net operating assets	5,984	6,312	6,084	16,271	14,086	10,168	975	965	945

PHARMACEUTICALS

The business of our Pharmaceuticals Division is conducted by approximately 80 affiliated companies in more than 140 countries. We are a world leader in the discovery, development, manufacture and marketing of prescription medicines. Our goal is to provide a broad portfolio of effective and safe products to patients through healthcare professionals around the world. As of December 31, 2003, the affiliated companies of our Pharmaceuticals Division employed 44,640 associates worldwide. In 2003, the affiliates of our Pharmaceuticals Division achieved consolidated sales of $16.0 billion, which represented 64% of the Group's total sales.

Our product portfolio includes a wide range of products in eight major disease areas: (i) cardiovascular/metabolism/endocrinology; (ii) oncology/hematology; (iii) neuroscience; (iv) transplantation/immunology; (v) respiratory/dermatology; (vi) arthritis/bone/hormone replacement therapy/gastrointestinal/urinary incontinence, (vii) infectious diseases, (viii) ophthalmics. Our Pharmaceuticals Division is organized into five Business Units: Primary Care, Oncology, Transplantation, Ophthalmics and Mature Products. The Business Units coordinate the worldwide research, distribution, marketing and sales of the products assigned to each. Because the Business Units of the Pharmaceuticals Division have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data are not required to be separately disclosed. On January 1, 2001, Pharmaceuticals Division took over responsibility for operating the ophthalmic pharmaceutical business previously managed by the CIBA Vision Business Unit of our Consumer Health Division.

The current product portfolio includes more than 40 key marketed products. In addition, the Development portfolio includes more than 75 projects involving potential new products and potential additional indications or formulations for existing products in various stages of development. See " Research and Development." Our pre-clinical portfolio compounds which have not yet entered into Phase I of development consists of more than 45 projects.

Key Marketed Products

The following table describes the key marketed products of our Pharmaceuticals Division, in alphabetical order, by therapeutic area. Not all products are registered in all markets for all of the indications described below.

Therapeutic area	Compound	Generic name	Indication	Formulation
Cardiovascular, metabolism and endocrinology	*Lotensin/ Cibacen*	benazepril hydrochloride	Hypertension	Coated tablet
	Lotensin HCT/Cibadrex	benazepril hydrochloride & hydrochlorothiazide	Hypertension Adjunct therapy in heart failure Progressive chronic renal insufficiency	Coated tablet
	Co-Diovan/ Diovan HCT	valsartan & hydrochlorothiazide	Hypertension	Film-coated tablet
	Diovan	valsartan	Hypertension Congestive Heart Failure	Capsule, film-coated tablet
	Lescol/ Lescol XL	fluvastatin sodium	Primary hypercholesterolemia and mixed dyslipidemia Secondary prevention of coronary events Slowing the progression of atherosclerosis Increase of high-density lipoprotein cholesterol (HDL-C)	Capsule, tablet
	Lotrel	amlodipine besylate & benazepril hydrochloride	Hypertension	Capsule
	Starlix	nateglinide	Type-II diabetes	Tablet
Oncology and hematology	*Femara*	letrozole	Advanced post-menopausal breast cancer	Coated tablet
	Gleevec/Glivec	imatinib mesylate /imatinib	Chronic myeloid leukemia Gastrointestinal stromal tumors	Tablet (US), capsule (EU, Japan)
	Sandostatin LAR/ Sandostatin SC	octreotide acetate for injectable suspension octreotide acetate	Acromegaly Symptoms associated with functional gastroenteropancreatic endocrine tumors, complication following pancreatic surgery	Vial, ampoule/pre-filled syringe
	Zometa	zoledronic acid	Hypercalcemia of malignancy Prevention of	Liquid Concentrate, vial

			skeletal-related events in patients with bone Metastases from solid tumors	

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Neuroscience	*Comtan*	entacapone	Parkinson's disease	Coated tablet
	Exelon	rivastigmine tartrate	Alzheimer's disease	Capsule, oral solution
	Focalin	dexmethylphenidate HCl	Attention-deficit hyperactivity disorder	Tablet
	Clozaril/Leponex	clozapine	Treatment-resistant schizophrenia Prevention and treatment of recurrent suicidal behavior in patients with schizophrenia and schizoaffective disorder	Tablet
	Ritalin/ Ritalin LA	methylphenidate HCl	Attention-deficit hyperactivity disorder	Tablet, capsule
	Stalevo	carbidopa, levodopa & entacapone	Parkinson's disease	Coated tablet
	Tegretol	carbamazepine	Epilepsy Acute and bipolar affective disorders Treatment of pain associated with trigeminal neuralgia	Tablet, chewable tablet, syrup, suppository
	Trileptal	oxcarbazepine	Epilepsy, including pediatric monotherapy	Tablet, oral suspension
Transplantation and immunology	*Certican*	everolimus	Prevention of organ rejection	Tablet, tablet for oral suspension
	myfortic	mycophenolate sodium	Prevention of graft rejection following kidney transplantation	Tablet
	Neoral	cyclosporine, USP modified	Prevention of graft rejection following organ and bone marrow transplantation Severe psoriasis Rheumatoid arthritis	Capsule, oral solution
	Sandimmune	cyclosporine, USP	Prevention of graft rejection following organ and bone marrow transplantation	Capsule, oral solution, concentrate for intravenous infusion

	Simulect	basiliximab	Acute organ rejection in de novo renal transplantation Atopic dermatitis (eczema) Uveitis Nephrotic syndrome	Vial

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Respiratory and dermatology	*Elidel*	pimecrolimus cream	Atopic dermatitis (eczema)	Cream
	Foradil	formoterol	Asthma Chronic obstructive pulmonary disease	Aeroliser (capsules) & aerosol
	Lamisil	terbinafine	Fungal infections of the skin and nails	Tablet, cream, DermGel, solution, spray
	Xolair	omalizumab	Allergic asthma	Subcutaneous injection
Arthritis, bone, hormone replacement therapy, gastrointestinal diseases and urinary incontinence	*Combipatch/Estalis*	estradiol norethisterone acetate	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	Estraderm/ Estraderm MX	*estradiol*	*Symptoms of estrogen* deficiency in post-menopausal women Post-menopausal osteoporosis	*Patch*
	Estragest TTS	estradiol norethisterone acetate	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	Miacalcin/Miacalcic	salmon calcitonin	Osteoporosis Paget's disease Hypercalcemia	Nasal spray, ampoule, vial
	Vivelle-Dot/Estradot	estradiol	Symptoms of estrogen deficiency in post-menopausal women Post-menopausal osteoporosis	Patch
	Voltaren	diclofenac	Inflammatory forms of rheumatism	Coated tablet, drop, ampoule,

			Pain management	suppository, gel
	Zelnorm/Zelmac	tegaserod maleate/ tegaserod	Irritable bowel syndrome with constipation	Tablet

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Infectious diseases	*Famvir*	famciclovir	Acute herpes zoster Recurrent genital herpes in immunocompetent patients Recurrent mucocutaneous herpes simplex infections in HIV-infected patients	Tablet
	Coartem/Riamet	artemether & lumefantrine	Treatment of Plasmodium falciparum malaria or mixed infections that include Plasmodium falciparum Standby emergency malaria treatment	Tablet
Ophthalmics	Dry Eye products	hydroxypropylmethylcellulose povidone carbomer	Dry eye	Eye drops, gel
	Visudyne	verteporfin	Wet form of age-related macular degeneration (AMD)	Vial, activated by laser light
	Zaditor/Zaditen	ketotifen	Allergic conjunctivitis	Eye drops

Not all products are registered in all markets for all of the indications described above.

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Compounds in Development

The following table describes our most important compounds and new indications for our existing products presently under development. "Filed" means that product registration documents have been filed with the FDA, with regulatory authorities in the EU (by either the centralized or mutual recognition procedure), and/or with national health authorities in Europe, but not necessarily in all jurisdictions.

Therapeutic area	Compound	Generic name	Indication	Estimated Filing Date/Current Phase[1]

Cardiovascular, metabolism and endicrinology	*Lotrel*	amlodipine besylate/benazepril hydrochloride	Hypertension (5-40 and 10-40)	US Filed
			High risk hypertension (ACCOMPLISH)	≥2007/III
	Diovan	valsartan	Congestive heart failure	US Approved, EU Filed
			Post-myocardial infarction (VALIANT)	US/EU Filed
			High risk hypertension (VALUE)	2005/III
	Sandostatin LAR	octreotide acetate	Diabetic retinopathy, other indications	2005/III
	Starlix/Diovan	nateglinide & valsartan	Prevention of onset of Type-II diabetes/cardiovascular morbidity & mortality	>2005/III
	LAF237	To be determined ("TBD")	Type-II diabetes	2006/II
	NKS104	pitavastatin	Dyslipidemia	≥2007/II
	SPP100	aliskiren	Hypertension	2005/II

Oncology and hematology	*Zometa*	zoledronic acid	Hypercalcemia of malignancy	Japan Filed
	Femara	letrozole	Breast cancer (extended adjuvant therapy)	2004/III
			Breast cancer (early adjuvant therapy)	2005/III
	ICL670	TBD	Chronic iron overload	2005/III
	PTK787	vatalanib	Solid tumors	2005/III
	EPO906	epothillone B	Solid tumors	≥2007/II
	OctreoTher	edotreotide	Somatostatin receptor positive tumors	TBD/II
	PKC412	midostaurin	Acute myeloid leukemia	2006/II

SOM230	TBD	Acromegaly/GEP neuroendocrine tumors	>2005/II
Gleevec/Glivec	imatinib mesylate/ imatinib	Solid tumors	TBD/II
LBQ707	gimatecan	Solid tumors	≥2007/II
RAD001	everolimus	Solid tumors	≥2007/II
LAQ824	TBD	Solid & liquid tumors	≥2007/I
XAA296	TBD	Solid tumors	≥2007/I
LBH589	TBD	Solid & liquid tumors	≥2007/I
AEE788	TBD	Solid tumors	≥2007/I
ABJ879	TBD	Solid tumors	≥2007/I

Neuroscience	*Focalin LA*	methylphenidate	Attention deficit hyperactivity disorder	2004/III
	Exelon Transdermal	rivastigmine tartrate	Alzheimer's disease	>2006/III
	Trileptal NP	oxcarbazepine	Neuropathic pain	TBD/III
	Exelon	rivastigmine tartrate	Non-Alzheimer's dementia	TBD/III
	ILO522	iloperidone	Schizophrenia	TBD/III
	AMP397	TBD	Epilepsy	>2007/II
	SAB378	TBD	Chronic pain	≥2007/II
	LIC477	licarbazepine	Bipolar disorder	≥2007/II
	TCH346	TBD	Parkinson's disease,	≥2007/II
			Amyotrophic lateral sclerosis	≥2007/II
	FTY720	TBD	Multiple sclerosis	≥2007/II
	AEP924	TBD	Depression	≥2007/I
	AAG561	TBD	Anxiety/depression	>2005/I

	XBD173	TBD	Anxiety	≥2007/I

Transplantation and immunology	*Certican*	everolimus	Prevention of organ rejection	EU approved/US Filed
	myfortic	mycophenolate soldium	Prevention of organ rejection	US/EU Filed
	FTY720	TBD	Transplantation	2005/III
Respiratory and dermatology	*Foradil*	formoterol	Multi-dose dry powder inhaler in asthma	US/EU Filed
	Xolair	omalizumab	Allergic asthma	US approved/EU 2004/III
	Lamisil	terbinafine	New oral formulation	2004/III
			Tinea capitis	TBD/III
	Elidel Ointment	pimecrolimus	Inflammatory skin diseases	2006/II
	ASM981	pimecrolimus oral	Inflammatory skin diseases	TBD/II
	QAB149	TBD	Asthma, chronic obstructive pulmonary disease	≥2007/II
	ASM981	pimecrolimus	Asthma	TBD/II
	ACZ885	TBD	Asthma	≥2007/I
	VAG624	TBD	Acne	≥2007/I
	Foradil/mometasone	formoterol/mometasone	Asthma, chronic obstructive pulmonary disease	≥2007/I

Arthritis, bone, hormone replacement therapy, gastrointestinal diseases and urinary incontinence	*Prexige*	lumiracoxib	Osteoarthritis, rheumatoid arthritis, chronic pain, primary dysmenorrhea	UK approved/US TBD/III
			New formulations (oral suspension; parenteral)	TBD/I

	Enablex/Emselex	darifenacin	Overactive bladder	US/EU Filed
	Zelnorm/Zelmac	tegaserod maleate/tegaserod	Irritable bowel syndrome	US Approved, EU 2004/III
			Chronic constipation	US Filed
			Functional dyspepsia Gastroesophageal reflux disease	2005/II 2006/II
	Zoledronic acid (ZOL446)	zoledronate acid	Paget's disease	2004/III
			Post-menopausal osteoporosis	≥2007/III
			Rheumatoid arthritis	≥2007/II
	AAE581	TBD	Osteoporosis	≥2007/II
	RGN303	TBD	Rheumatoid arthritis	≥2007/II
	RAD001	everolimus	Rheumatoid arthritis	≥2007/II
	SMC021	calcitonin	Osteoporosis	TBD/II
	ABN912	TBD	Rheumatoid arthritis	≥2007/I
	AKU517	TBD	Gastroesophageal reflux disease	≥2007/I

Infectious diseases	LDT600	telbivudine	Hepatitis B	2005/III
	LDC300	valtorcitabine	Hepatitis B	2006/II
	LBM415	TBD	Anti-bacterial	≥2007/I
Ophthalmics	*Visudyne*	verteporfin	Age-related macular degeneration (occult)	2006/III
			Age-related macular degeneration (minimally classic)	≥2007/III
	Lucentis	ranibizumab	AMD	≥2007III
	PIR335	pirenzepine	Myopia	≥2007/II
	Elidel	pimecrolimus	Dry Eye	≥2007/II

(1) Phase I: Clinical trials in healthy volunteers to determine safety and tolerability. 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.

The tables shown above and the summary that follows describe each of our Pharmaceuticals Division's eight key therapeutic areas. Unless otherwise indicated, and subject to required regulatory approvals and, in certain instances, contractual limitations, our intention is to sell the key marketed products throughout the world. These same compounds are in various stages of development throughout the world. For some compounds, the development process is ahead in the US, for other compounds, development is behind in the US. Due to the uncertainties associated with the development process, and due to regulatory restrictions in some countries, including the US, it may not be possible to obtain registration of compounds in development for any or all of the indications referred to in this Form 20-F.

Cardiovascular/Metabolism/Endocrinology

Our Pharmaceuticals Division markets a wide range of products for the treatment of cardiovascular disease, including products for the treatment of hypertension, hyperlipidemia, angina pectoris and heart failure. Ongoing research is focused on the development of innovative new agents to treat metabolic disorders, such as Type-II diabetes, which are associated with serious cardiovascular events, including peripheral vascular disease, diabetic retinopathy, nephropathy, stroke and myocardial infarction.

Key Marketed Products

Lotensin/Cibacen (benazepril hydrochloride) and *Lotensin HCT/Cibadrex* (benazepril hydrochloride & hydrochlorothiazide) are ACE-inhibitors indicated for the treatment of hypertension. In addition, *Lotensin/Cibacen* is registered as adjunct therapy in heart failure and for treatment of Progressive Chronic Renal Insufficiency in certain countries.

Diovan (valsartan) and *Co-Diovan/Diovan HCT* (valsartan & hydrochlorothiazide) are pioneering entrants in the angiotensin II receptor blockers (ARBs) class of antihypertensive agents. The ARBs have proven to be a key growth class of drugs within the antihypertensive market. The fixed combination product, *Co-Diovan*, provides additional antihypertensive efficacy for patients who require a greater reduction in blood pressure than can be achieved with monotherapy. In the US, *Diovan* is approved to treat congestive heart failure in patients who are intolerant of angiotensin-converting-enzyme (ACE) inhibitors. *Diovan* is the first ARB to obtain an indication beyond hypertension.

Lescol/Lescol XL (fluvastatin sodium) is a lipid-lowering agent for the treatment of primary hypercholesterolemia and mixed dyslipidemia, secondary prevention of coronary events, slowing the progression of atherosclerosis, and increasing high-density lipoprotein cholesterol (HDL-C). *Lescol XL* 80 mg is an extended-release line extension of the *Lescol* 20 and 40 mg immediate-release capsules. *Lescol XL* effectively treats the entire lipid profile LDL, HDL and triglycerides*Lescol XL* was successfully introduced in major markets during the years 2000-02.

Lotrel (benazepril-amlodipine) is a fixed combination of the ACE-inhibitor benazepril and a leading calcium antagonist (amlodipine). It is marketed only in the US.

Starlix (nateglinide) is a pioneering member of a class of drugs for the treatment of patients with Type-II diabetes, also known as adult-onset diabetes. The drug aims to restore the early phase of insulin release which helps control blood glucose levels at mealtime. We licensed the compound from Ajinomoto, and own marketing rights for the drug worldwide, except for Japan and several other Asian markets. A fixed combination product of *Starlix* and rosiglitazone was approved by FDA in 2003.

Compounds in Development

Diovan (valsartan) has been approved for congestive heart failure in the US and filed for this indication in the EU. *Diovan* is the first ARB to have demonstrated positive clinical benefits in heart failure in a large scale trial. The product has been filed for post-myocardial infarction, and is in further development for high-risk hypertension (Phase III) and prevention of diabetes and cardiovascular disease in patients with impaired glucose tolerance (IGT). *Diovan* is currently being investigated alone and in combination with *Starlix* (nateglinide). In the NAVIGATOR (Nateglinide and Valsartan in Impaired Glucose Tolerance and Outcomes Research) trial, initiated in November 2001, 9,179 patients aged 50 years or older have been recruited for treatment with *Diovan* and/or *Starlix* to examine the effect on progression from IGT to Type-II diabetes after 3 years, as well as on cardiovascular morbidity and mortality in this high-risk patient population. Results on the cardiovascular endpoint are expected to be available in 2007/08.

Lotrel (amlodipine besylate & benazepril hydrochloride) has two new dosages for hypertension (*Lotrel* 5-40 and *Lotrel* 10-40). A product registration file for these additional dosages has been submitted to the FDA in the US, which issued an approvable letter. We expect to launch these new dosages in the second half of 2004. In addition, in the ACCOMPLISH trial, which began in October 2003, more than 12,000 patients are being treated with *Lotrel* or with benazepril hydrochloride and hydrochlorothiazide, to investigate cardiovascular morbidity and mortality in patients with high risk hypertension.

Sandostatin LAR (octreotide acetate) is in development for diabetic retinopathy (Phase III). This condition affects approximately 15% of patients with diabetes and is one of the leading causes of blindness in people of working age. Currently there are no effective drugs available to treat diabetic retinopathy.

Starlix (nateglinide) is currently being investigated in combination with *Diovan*. See discussion above.

LAF237 is a DPP4 inhibitor in Phase II development for the treatment of Type-II diabetes. Blocking the action of the enzyme DPP4 has been shown to improve glycemic control by increasing GLP-1 levels (a peptide that augments glucose-induced insulin secretion and also affects other aspects of glycemic control). Phase I studies have shown that once-a-day dosing maintains DPP-IV activity below the levels believed to be needed to increase GLP-1 activity sufficiently for a therapeutic effect**.** Phase IIB studies have shown that LAF237 is efficacious both as monotherapy and in combination with metformin, as well as showing a good safety and tolerability profile.

NKS104 (pitavastatin) is a lipid-lowering agent, in development for the treatment of dyslipidemia. We have European marketing rights to pitavastatin under a license from Kowa. Clinical trials to date have shown that NKS104 lowers LDL cholesterol and triglycerides while increasing HDL cholesterol levels. The compound is in Phase II.

SPP100 (aliskiren) is an orally effective renin inhibitor being developed for the treatment of hypertension and other cardiovascular indications. Blood pressure lowering effects have been demonstrated in Phase II trials, with no significant adverse events observed. The compound was out-licensed to Speedel, but we exercised an option to license the product back in June 2002. As a result, we have global rights to develop and commercialize this compound.

Oncology and Hematology

The Oncology and Hematology disease area is a rapidly growing and increasingly important specialty segment. We market products for the treatment of a number of different cancers and for cancer complications, including advanced malignancies involving bone. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of cancer, focusing in particular on the major forms of solid tumors (breast, prostate, lung, colorectal and ovarian cancer), which account for approximately 50% of all deaths from cancer. In addition, compounds are being developed for the treatment of other forms of oncologic and hematologic conditions.

Key Marketed Products

Femara (letrozole) is an oral aromatase inhibitor for first-line treatment of postmenopausal women with hormone receptor positive or hormone receptor unknown locally advanced or metastatic breast cancer. It is also approved for the treatment of advanced breast cancer in postmenopausal women with disease progression following antiestrogen therapy, and as neo-adjuvant (pre-operative) therapy. *Femara* is currently available in more than 75 countries worldwide.

Gleevec/Glivec (imatinib mesylate/imatinib) is a signal transduction inhibitor, which in 2003 gained approval in Japan for the treatment of certain forms of gastrointestinal stromal tumors (GIST). It received approval for this indication in the US and EU in 2002. This is the second form of cancer which this drug has been approved to treat. *Gleevec/Glivec* was originally approved in 2001 for the treatment of patients with chronic myeloid leukemia (CML) in the blast crisis, accelerated phase or in chronic phase after failure of interferon-alpha therapy. The CML indication was expanded by the FDA (in December 2002) and the EU (in January 2003) to permit *Gleevec/Glivec* to be used to treat newly diagnosed patients with CML.

Sandostatin SC*/Sandostatin LAR* (octreotide acetate) is a synthetic octapeptide derivative of the hormone somatostatin indicated for the treatment of pancreatic and gastrointestinal endocrine tumors, acromegaly, and acute variceal bleeding. Sandostatin SC is subject to near-term patent expirations. However, patent protection continues in major markets for *Sandostatin LAR*, which represents a significant and growing proportion of our octreotide sales. See " Intellectual Property." *Sandostatin LAR* is a long-acting release formulation (once every 28 days) approved for the control of symptoms such as the severe diarrhea and flushing associated with metastatic carcinoid tumors, and the severe diarrhea associated with vasoactive intestinal polypeptide secreting tumors. It also is indicated for the treatment of acromegaly.

Zometa (zoledronic acid) is a potent third-generation bisphosphonate to treat hypercalcemia of malignancy, as well as to prevent skeletal-related events in patients with bone metasteses from solid tumors. It is administered as an infusion of 4 mg over 15 minutes. In 2002, *Zometa* received approval in most key markets for prevention of skeletal related events in patients with advanced malignancies involving bone. These tumor types include prostate cancer, breast cancer, lung cancer, and multiple myeloma.

Compounds in Development

Zometa (zoledrenic acid) is the subject of a product registration filing which has been submitted to the regulatory authorities in Japan for the treatment of hypercalcemia of malignancy, an indication approved in the US and EU in 2001. The prevention of bone metasteses project has been terminated.

Femara (letrozole) is in Phase III development for extended adjuvant therapy in the treatment of breast cancer. Interim results from the first study to explore post-tamoxifen use of *Femara* in postmenopausal women with early breast cancer showed reduced risk of recurrence (43%) and significantly improved disease-free survival. We expect to file the results of this study with regulatory authorities in 2004. A second phase III study testing early adjuvant use of *Femara* is ongoing and results are expected by late 2004 and are expected to be filed in early 2005.

ICL670 is an iron chelator currently in Phase III clinical development. It was designed to enhance patient acceptance of chelation treatment. Iron accumulation resulting from red blood cell lysis can lead to organ damage and, ultimately, death. ICL670 has been shown preclinically and clinically to efficiently induce iron excretion. Bioavailability has been demonstrated orally. Recently published clinical data (American Society of Hematology 2002) demonstrate the clinical effectiveness of ICL670 in achieving negative iron balance. The goal is to make iron chelation therapy more practical for patients with chronic iron overload.

PTK787 (vatalanib) is a new molecular entity with a novel mechanism of action, which inhibits tumor growth and the development of metastases through inhibition of tumor vascularization. It is expected to be clinically effective as an oral anti-angiogenic agent, in particular in combination with standard therapies against a broad range of tumor types. No

significant toxicities are expected at efficacious doses that would preclude chronic administration. PTK787 is in Phase III development, and has shown no significant toxicity to date. The compound is being developed in collaboration with Schering AG of Germany.

EPO906 (epothilone B), a novel tubulin polymerizing compound, is a cytotoxic with a similar mechanism of action as Taxol® (paclitaxel). The taxane segment is the largest cytotoxic market segment in oncology. Preclinically, epothilone B has shown more potency than paclitaxel and more activity in paclitaxel resistant tumors. Responses have been observed in Phase I in several solid tumors and it is now in Phase II clinical development. Dose limiting toxicity is diarrhea. Significant myelosuppression has not been reported to date.

OctreoTher (edetreotide) is a peptide hormone analogue that carries a radioactive element specific to somatostatin receptor positive malignant cells and is in phase II trials for the treatment of solid tumors.

PKC412 (midostaurin) is a protein kinase inhibitor (FLT3 inhibitor) which is in development for the treatment of acute myeloid leukemia. Pilot studies have shown biological activity in more than 70% of patients with FLT3 mutations who were treated with PKC412 as a single agent therapy. PKC412 is currently in Phase II. New clinical studies will investigate PKC412 in combination with chemotherapy to determine if responses of longer duration can be achieved.

SOM230 is a somatostatin analog with a higher receptor affinity to sst 1, 2, 3 and 5 than currently marketed products. In addition, compared to currently available somatostatin analogs, the SOM230 in vitro and in vivo data indicates a more effective and selective inhibition of GH secretion, and thus a unique hormone inhibitory profile. It provides longer lasting IGF-1 suppression across species and a longer half life of (t1/2) 23 hours. SOM230 Phase II trials in acromegaly, Cushing's disease and GEP tumors were initiated in 2002.

Gleevec/Glivec (imatinib mesylate/imatinib) is being studied as a potential treatment of solid tumors primarily as part of a combination therapy. Preclinical data has shown that *Gleevec/*Glivec enhances the effect of chemotherapy in animal models. Phase II trials are in progress in the

following cancers: hormone refractory prostate cancer, Kit positive Acute Myeloid Leukemia, Glioblastoma Multiforme and refractory metastatic gastrointestinal stromal tumors.

LBQ707 (gimatecan) has been licensed-in from Sigma-Tau. This is a novel oral topoisomerase I inhibitor which is a second generation camptothecin derivative. Preclinical data have shown greater potency than topotecan or irinotecan and activity in cell lines resistant to topotecan and irinotecan. Confirmed partial responses have been seen in phase I studies in non-small cell lung cancer, breast cancer and colorectal cancer. It is now in phase II development for the treatment of solid tumors.

RAD001 (everolimus) is an mTOR pathway inhibitor and is in Phase II development for the treatment of solid tumors. RAD001 is an orally available rapamycin derivative. Experiments have shown it to possess antiproliferative properties in a wide range of tumor models through its inhibition of the mTOR protein kinase. This makes it an attractive candidate for a broad range of cancer indications both as a single agent, and as part of combination therapies.

LAQ824 is a histone deacetylase inhibitor in Phase I development for the treatment of solid tumors.

XAA296 is a microtubule stabilizer in Phase I development for the treatment of solid tumors.

LBH589 is a histone deacetylase inhibitor in Phase I development for the treatment of solid tumors.

AEE788 is a dual Erb-B and VEGF receptor inhibitor in phase I development for the treatment of solid tumors.

ABJ879 is a microtubule stabilizer in Phase I development for the treatment of solid tumors.

Neuroscience

Our Pharmaceuticals Division markets a broad range of products for neurological diseases, including agents to treat patients with schizophrenia, epilepsy, Parkinson's disease, Alzheimer's disease, and attention-deficit hyperactivity disorder (ADHD). Ongoing research to extend the current product portfolio in this disease area includes projects in psychiatric disease (psychoses, depression, and anxiety), neurological disorders (epilepsy, Parkinson's disease, and Alzheimer's disease) and chronic pain.

Recently Launched Products

Stalevo (carbidopa, levodopa & entacapone) treats Parkinson's disease by both enhancing the recognized "gold standard" levodopa through combination with both carbidopa and entacapone, and by aiding patient compliance through simplified dosing. *Stalevo* is licensed from Orion Pharma. Orion retains exclusive rights to market *Stalevo* in certain European countries.

Key Marketed Products

Comtan (entacapone) treats Parkinson's disease by enhancing the action of levodopa, the standard therapy for Parkinson's disease. The compound is licensed from Orion Pharma. Orion retains exclusive rights to market *Comtan* under a different brand name in certain European countries.

Exelon (rivastigmine tartrate) is a therapy for the treatment of patients with mild to moderate Alzheimer's disease. *Exelon* has been approved in all major markets, including the US and the 15 member-states of the EU.

Focalin (dexmethylphenidate HCl) is the single isomer version of methylphenidate and is approved in the US for the treatment of ADHD. This compound is licensed from Celgene Corporation.

Clozaril/Leponex (clozapine) is a neuroleptic agent used in treatment-resistant schizophrenia and the prevention of suicidal behavior in patients with schizoaffective disorders. It is experiencing competition from generic competitors in many markets, including the US.

Ritalin LA (methylphenidate HCl) has been approved in a number of countries throughout the world (including the US), for the treatment of ADHD, and further approvals are expected. *Ritalin LA* is a once-daily formulation of *Ritalin* (methylphenidate HCl) which eliminates the need for a mid-day dose during school. *Ritalin LA* uses SODAS technology, a proprietary drug delivery technology under a license from Elan.

Tegretol (carbamazepine) has long been a mainstay for the treatment of epileptic seizures. It is also indicated for the treatment of pain associated with trigeminal neuralgia and, in certain countries, for the treatment of acute and bipolar affective disorders.

Trileptal (oxcarbazepine) is an anti-epileptic drug for the treatment of partial seizures as adjunctive or monotherapy in both adults and children (over 4 years of age).

Compounds in Development

Focalin LA (dexmethylphenidate HCl) is the single isomer version of methylphenidate. A long-acting formulation is in Phase III development for the treatment of ADHD. This compound is licensed from Celgene. *Focalin LA* uses SODAS technology, a proprietary drug delivery technology under a license from Elan.

Exelon (rivastigmine tartrate) is in development for additional indications and formulations. *Exelon* is being investigated in Phase III trials for the treatment of non-Alzheimer's dementia. A transdermal formulation, *Exelon TDS*, is in Phase III development for Alzheimer's disease, and is aimed at increasing compliance and the tolerability of the therapy.

Trileptal NP (oxcarbazepine) is in Phase III development for the treatment of neuropathic pain.

ILO522 (iloperidone) is a mixed serotonin/dopamine antagonist for the treatment of schizophrenia and other related psychotic disorders. Iloperidone is licensed from Titan Pharmaceuticals, and is currently in Phase III.

AMP397 is an AMPA receptor antagonist in Phase II development for the treatment of epilepsy.

SAB378 is a cannabinoid-(CB)-1 receptor agonist in phase II development for the treatment of chronic pain

LIC477 (licarbazepine) is a sodium channel blocker. Phase III trials of LIC477 are expected to start in 2004 for the treatment of acute manic episodes of bipolar I disorders.

TCH346 is in Phase II development and is targeted as first line intervention for neurodegenerative diseases such as Parkinson's disease, and amyotrophic lateral sclerosis, where it functions to provide neuroprotection and thereby delays further progression of these diseases.

FTY720, the first lymphocyte homing agent, is a totally new and unique therapeutic agent. In addition to clinical trials in transplantation, FTY720 is also in phase II development for the treatment of multiple sclerosis. FTY720 is licensed from Mitsubishi.

AEP924 is a somatostatin (sst)3 receptor antagonist in phase I trials for the treatment of depression.

AAG561 is in Phase I development, and could be the first in class among the corticotrophin-releasing factor 1 antagonists, a novel concept in the treatment of depression and anxiety. Phase II trials are expected to start during 2004.

XBD173 is a mitochondrial benzodiazepine ligand in phase I trials for the treatment of anxiety. XBD173 is licensed from Dainippon.

Transplantation/Immunology

With a strong commitment to research and a 20-year history of commercialization, we are acknowledged as a leader in transplantation.

Recently Launched Products

Certican (everolimus) is a novel proliferation inhibitor with immunosuppressant properties that targets primary causes of allograft dysfunction (also known as chronic rejection) of a transplanted organ, including acute rejection and vascular remodeling. *Certican* has completed the EU mutual recognition procedure (MRP) as adjunctive therapy for use in combination with *Neoral* and corticosteroids, and is therefore being finalized for commercial use in the 15 nations of the EU for the prevention of organ rejection in kidney and heart transplantation. Product registration files for *Certican* have been submitted to regulatory authorities in the US, and an approvable letter was received from the FDA.

myfortic (mycophenolate sodium) is an advanced, enteric-coated formulation of mycophenolate sodium designed to reduce mycophenolic acid (MPA)-related gastrointestinal (GI) adverse events by delaying the release of MPA. This could lead to fewer GI adverse events and therefore may reduce the need for dose modifications. *myfortic* is an adjunctive therapy which has been studied for use in combination with *Neoral* and corticosteroids to prevent rejection episodes in patients with kidney transplants. *myfortic* has been approved in 36 countries, and is marketed in Switzerland, Australia, India, Brazil and a number of other Latin American countries. *myfortic* has been filed with the FDA, and the MRP is ongoing in Europe.

Key marketed products:

Sandimmun (cyclosporine, USP) was introduced in 1982 for the prevention of organ rejection among patients with solid organ transplants and, in some countries, bone marrow transplantation.

Neoral (cyclosporine, USP modified) builds on the established clinical utility of Sandimmune to provide primary immunosuppression in organ transplant patients. *Neoral* is also approved for the treatment of severe psoriasis and severe rheumatoid arthritis. *Neoral* is formulated as a microemulsion, thereby providing improved absorption and less variability in dosing in comparison to the original *Sandimmune* product, which is a macroemulsion formulation. Despite our patent protection for *Neoral*, generic companies have launched competing products in the US, Europe and elsewhere, and will continue to compete vigorously. See " Intellectual Property."

Simulect (basiliximab) is a chimeric monoclonal antibody that suppresses interleukin-driven proliferation of T-cells. *Simulect* is used for induction therapy, and is designed to complement *Neoral* or other primary immunosuppressants in preventing acute rejection episodes in kidney transplantation.

Compounds in Development

FTY720, the first agent in a new class of drugs called Sphingosine 1-Phosphate Receptor (S1P-R) agonists. It is designed to prevent rejection by redirecting lymphocytes away from the transplant graft, preventing lymphocytes from damaging the graft, while maintaining the response of lymphocytes against infective agents. It is being developed for use in combination with *Neoral* or *Certican* in kidney transplantation and is currently in phase III clinical trials. FTY720 is licensed from Mitsubishi.

Respiratory/Dermatology

Our Dermatology portfolio covers a broad range of indications, with marketed products for the treatment of atopic dermatitis (eczema), fungal infections and asthma. In addition, ongoing research and development is aimed at developing new compounds and extending the clinical utility of existing compounds in the areas of allergic and inflammatory skin disease, such as contact eczema and psoriasis. There is considerable demand for new dermatology treatments in these areas where current therapies are handicapped by limited efficacy or unacceptable side effects. We are committed to expanding our product range in the important Respiratory disease area. A discovery and development program is aimed at providing improved therapeutic options in the treatment of asthma and chronic obstructive pulmonary disease (COPD), which includes chronic

bronchitis and emphysema. In addition, ongoing research is focused on extending the clinical use of *Xolair* in areas such as food allergy and seasonal and perennial allergic rhinitis.

Recently Launched Products

Xolair (omalizumab) is a novel anti-IgE monoclonal antibody developed to treat allergic disease, irrespective of allergen, by normalizing serum IgE. *Xolair* is the first of a new class of asthma treatments designed to inactivate a critical pathway in allergic disease (IgE). It is the most significant advance in asthma treatment in the past 15 years and is the only asthma treatment dosed every 2 or 4 weeks. The drug was approved by the FDA in June 2003 and has been launched in the US in collaboration with Genentech for the treatment of moderate to severe allergic asthma. It is also approved in Australia for the same indication and was launched there in September 2003. Novartis, Genentech and Tanox are parties to an agreement for the joint development of anti-IgE monoclonal antibodies.

Elidel (pimecrolimus cream) is a selective inflammatory cytokine inhibitor used in the treatment of atopic dermatitis (eczema). The compound is a member of a new class of agents the ascomycin macrolactams*Elidel* is the only non-steroid treatment for atopic dermatitis clinically proven to prevent flare progression and improve disease control versus conventional practice with topical steroids. Its non-steroid safety profile makes *Elidel* suitable for all body areas for both children and adults. *Elidel* is now approved in 66 countries globally including the US and EU. It has so far been launched in 48 countries, including the US and many major EU countries.

Key Marketed Products

Lamisil (terbinafine) is used in the treatment of fungal infections of the nails. *Lamisil* treats the fungus (fungicidal in vitro), rather than simply preventing further fungal growth. "Over-the-counter" formulations indicated primarily for athletes foot are marketed by our OTC Business Unit in many markets, including the US.

Foradil (formoterol) is a long-acting bronchodialator indicated for the treatment of asthma and COPD, which has been approved and launched in the US in 2001. During the fourth quarter of 2002, we licensed the exclusive US distribution and marketing rights of *Foradil* to Schering-Plough. We continue to market and distribute *Foradil* outside the US, where the brand has achieved broad acceptance among specialists and general practitioners. The long-acting bronchodilator is a relatively new addition to the range of treatments for asthma, and is distinguished by its rapid onset of action (one to three minutes) and long-lasting effect from a single dose (12 hours). *Foradil* is currently marketed principally in Europe in a single-dose dry powder inhaler (the *Aerolizer*), and in certain markets as a pressurized metered dose inhaler. *Foradil* is licensed from Yamanouchi.

Compounds in Development

Foradil (formoterol), licensed from Yamanouchi, has received an approvable letter from the FDA for the *Certihaler,* a novel, breath-activated multi-dose dry powder inhaler technology which was

developed by, and will be manufactured by SkyePharma, and which will give patients confirmation that the full dose of *Foradil* medication has been taken. We licensed the exclusive US distribution and marketing rights to this product to Schering Plough. Product registration files for the *Foradil Certihaler* have also been filed with regulatory authorities in Europe. We have also entered into a co-development agreement with Schering Plough to develop a fixed dose combination product of Foradil with mometasone. A prior agreement with Ivax to market *Foradil* with Ivax's Airmax device has been discontinued.

Xolair (omalizumab) is the subject of ongoing additional phase III trials in Europe in severe asthma patients. We expect to refile our product registration file with the EMEA in 2004.

Lamisil (terbinafine) is in Phase III development for a new dosing regimen and for tinea capitis. A new oral formulation (NOF) is also in phase III clinical trials for the treatment of onychomycosis.

ASM981 (pimecrolimus, the active component of Elidel cream) oral and ointment formulations are also in Phase II development for inflammatory skin diseases. In addition, ASM981 oral is in Phase II development for the treatment of asthma.

QAB149 is in Phase II development for the treatment of asthma and COPD. QAB149 is an inhaled long-acting selective B2-adrenoceptor agonist, with the potential to be the first truly once-daily administered compound from this class. The molecule is a single enantiomer, and is anticipated to have an improved side-effect profile compared to currently prescribed B2-adrenoceptor agonists. We recently entered into an agreement with Skye Pharma to develop QAB149 as monotherapy in the *Certihaler* multi-dose dry powder inhalation device.

ACZ885 is an inhibitor of IL-1 mediated eosinophillia and lung macrophage accumulation and is in phase I development for the treatment of asthma and chronic obstructive pulmonary disease.

VAG624 is a steroid sulphatase inhibitor in phase I development for the treatment of acne.

Arthritis/Bone/Hormone Replacement Therapy/Gastrointestinal Diseases/Urinary Incontinence

We are a leader in the areas of rheumatology, bone metabolism disorders and hormone replacement therapy with products intended to treat rheumatoid arthritis, osteoarthritis, osteoporosis and early menopausal symptoms, such as hot flashes, and to prevent the long-term complications of these conditions. The bone and rheumatology research and development pipeline includes new compounds for the treatment of rheumatoid arthritis and osteoarthritis, including the "IL-1 trap" which we licensed from Regeneron in 2003, as well as potential products for the treatment of bone metabolism disorders, such as osteoporosis.

Research and development in hormone replacement therapy (HRT) is primarily focused on improving the delivery of therapy and minimizing the hormonal dose via transdermal patch technology. After a Europe-wide analysis of the risk-benefit profile of HRTs, in December 2003, European health authorities placed an "Urgent Safety Restriction" on the use of HRTs for the prevention of osteoporosis. As a result, the osteoporosis indication of our products *Estalis, Estraderm TTS, Estraderm MX, Estradot* and *Estragest* in the EU will be limited to second line therapy for prevention of osteoporosis in postmenopausal women at high risk of future fractures who are intolerant of, or contraindicated for, other medicinal products approved for the prevention of osteoporosis. This decision does not limit sales of the listed products for other indications, and does not apply to our *Miacalcic* product.

Our Pharmaceuticals Division has entered the gastroenterology market with the launch of *Zelnorm/Zelmac* for irritable bowel syndrome with constipation. In addition, we recently submitted data to FDA seeking approval for the use of *Zelnorm/Zelmac* to treat chronic constipation. We intend to further strengthen our GI franchise with development efforts regarding the use of *Zelnorm/Zelmac* to treat upper gastrointestinal disorders such as dyspepsia, gastroesophageal reflux disease (GERD) and other conditions. We also recently entered into a collaboration with Sankyo to co-develop a promising acid pump antagonist, which has just entered Phase I clinical development. The gastrointestinal disease area is

an increasingly important segment due to the high level of as-yet unmet patient needs. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of upper and lower gastrointestinal disorders.

We have expanded this area of products with the acquisition of *Enablex/Emselex* (darifenacin), a compound in very late stage of clinical development, intended for the treatment of overactive bladder (urinary incontinence). We recently received an approvable letter from the FDA for it and expect to bring it to market in 2004.

Key Marketed Products

Combipatch/Estalis (estradiol & norethindrone acetate transdermal system) is a combination estrogen/progestin treatment for symptoms of estrogen deficiency in post-menopausal women, and the prevention of post-menopausal osteoporosis. The product offers a convenient treatment in a single patch for patients with an intact uterus. *Combipatch* is not approved in the US for the prevention of post-menopausal osteoporosis. This product is sublicensed from Aventis for sale in countries outside the US and Japan under the brand name *Estalis*. In the US, the product is licensed by Noven Pharmaceuticals to Vivelle Ventures, which is a joint venture between Noven and our US affiliate, for sale under the brand name *Combipatch*.

Estraderm and *Estraderm MX* (estradiol transdermal system) are estrogen-only treatments for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. These are earlier generations of transdermal patches.

Estragest TTS (estradiol & norethindrone acetate transdermal system) is a low-dose combination estrogen/progestin treatment for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. *Estragest TTS* is an earlier generation of transdermal patches. *Estragest TTS* offers a high amenorrhea rate in a single patch for patients with an intact uterus. This product is not approved in the US.

Miacalcin/Miacalcic (salmon calcitonin) is a treatment for post-menopausal osteoporosis in females greater than five years post-menopause with low bone mass relative to healthy pre-menopausal females. The drug is available in an injectable form and a nasal spray. In the US, the nasal spray is indicated for osteoporosis. In the US, the injectable product is indicated for osteoporosis as well as the treatment of symptomatic Paget's disease of bone and for the treatment of hypercalcemia.

Vivelle-Dot/Estradot (estradiol transdermal system), licensed from Noven Pharmaceuticals is an estrogen-only treatment for symptoms of estrogen deficiency in post-menopausal women, and prevention of post-menopausal osteoporosis. *Vivelle-Dot/Estradot* is the smallest estrogen patch available and offers a thin, flexible and discreet hormone therapy. The lowest dose of *Vivelle-Dot/Estradot* (0.025 mg/d) is approved for the prevention of post-menopausal osteoporosis.

Voltaren (diclofenac) is a non-steroidal anti-inflammatory drug (NSAID) for the treatment of inflammatory and degenerative forms of rheumatism (articular and non-articular), post-operative and post-traumatic pain and acute attacks of gout and migraines. This product faces generic competition. An "over-the-counter" formulation of the topical form of this product is marketed by our OTC Business Unit in several markets under the name *Voltaren Emulgel*, for the treatment of inflammation of tendons, ligaments, muscles and joints, and for localized forms of soft-tissue and degenerative rheumatism.

Zelnorm/Zelmac (tegaserod maleate/tegaserod) is a 5-HT4 partial agonist developed to address the need for a safe and effective treatment of irritable bowel syndrome with constipation, relieving such symptoms as abdominal discomfort/pain, bloating and constipation. Zelnorm/Zelmac has been approved for marketing in over 50 nations including the US, China, Switzerland, Brazil, Mexico, Australia, and Canada. The product has been launched in over 30 countries. In certain countries, including the US, *Zelnorm/Zelmac* is approved for the treatment of women only.

Compounds in Development

Prexige (lumiracoxib) is a non-steroidal anti-inflammatory drug (NSAID) that selectively inhibits the COX-2 enzyme. In 2002, we submitted product registration files for *Prexige* to the FDA, the UK Medicines and Healthcare Products Regulatory Agency (MHRA), and several other health authorities for the indications of osteoarthritis, rheumatoid arthritis and acute pain, including primary dysmenorrhea. *Prexige* received its first regulatory approval in Mexico in March 2003 for all indications, followed by several approvals in Latin America. Approval of the osteoarthritis and acute pain indications was

obtained from the UK MHRA in September 2003. We received a non-approvable letter from the FDA in September 2003, requesting the submission of the final report of the ongoing TARGET study as well as additional clinical data for the indications of osteoarthritis and acute pain. TARGET, a large outcome study, investigated the long-term gastrointestinal benefits and cardiovascular safety of *Prexige*, with and without low dose aspirin. The study has just been completed, and results of this study are expected in the third quarter of 2004. For rheumatoid arthritis, we withdrew our initial application for this indication in the US and did not receive an approval in the UK. However, we have recently completed an additional pivotal trial for this indication. New formulations (an oral suspension and a parenteral) of *Prexige* are in Phase I development.

Enablex/Emselex (darifenacin) is an M3-selective receptor antagonist (M3SRA). It is the first in a new class of compounds for the treatment of overactive bladder. It was acquired from Pfizer in April 2003. Product registration files for *Enablex* have been filed with both the FDA and European Health Authorities. We received an approvable letter from the FDA in October 2003 and are planning to launch the drug in 2004 after completing the additional clinical work requested.

Zelnorm/Zelmac (tegaserod maleate/tegaserod), a 5-HT4 partial agonist, was approved by the FDA for women suffering from irritable bowel syndrome with constipation in July 2002. In Europe, discussions with the European Medical Evaluations Agency resulted in initiation of a registration trial to examine the effectiveness of tegaserod in episodic treatment. Completion of this trial is expected in 2004. Phase III trials in chronic constipation have been completed with positive results which were submitted to the FDA in October 2003. *Zelnorm/Zelmac* is under development in dyspepsia (Phase II) and GERD, (Phase II). We are also exploring the use of *Zelnorm/Zelmac* as a treatment for diabetic gastropathy.

Zoledronic acid (ZOL446 zoledronate acid) is a bisphosponate being developed for postmenopausal osteoporosis and Paget's disease. A Phase II trial in post-menopausal osteoporosis patients has demonstrated that zoledronic acid, administered as a once per year infusion, induces a sustained reduction in bone resorption and significant increases in bone mineral density at different skeletal sites. Phase III trials in post-menopausal osteoporosis and Paget's disease are currently in progress. Phase II trials in rheumatoid arthritis are in progress. We market zoledronic acid for oncologic indications under the brand name *Zometa*.

AAE581 is being developed for the treatment of osteoporosis and is in Phase II. AAE581 is a specific inhibitor of osteoclast-derived cathepsin K, leading to reduced collagen breakdown and osteoclast-mediated bone resorption. The compound represents a novel mode of action and has been shown to effectively suppress biological markers of bone turnover up to 28 days in healthy volunteers and up to 3 months in healthy post-menopausal women, compared to placebo.

RGN303 is a protein construct blocking the activity of Interleukin-1 (an "IL-1 trap"). We recently licensed this compound from Regeneron. Blocking IL-1 is a proven therapeutic approach in rheumatoid arthritis, and IL-1 represents an important target for pharmaceutical development in other inflammatory conditions. Currently RGN303 is in Phase II development for the treatment of rheumatoid arthritis.

RAD001 (everolimus) is being developed for the treatment of rheumatoid arthritis and is in Phase II. RAD001 is an inhibitor of T-cell proliferation. See " Oncology and Hematology Compounds in Development."

SMC021 (calcitonin) is a regulator of calcium homeostasis and is in Phase II development for the treatment of osteoporosis. SMC021 is an oral formulation of salmon calcitonin. Calcitonin, a peptide, inhibits bone resorption by acting on specific receptors on osteoclasts. In addition, salmon calcitonin has been shown to have analgesic properties. Injectable and nasal spray calcitonins are currently on the market. SMC021 is a novel concept in oral peptide delivery.

ABN912 is a human monoclonal antibody against the monocyte chemoattractant protein-1 (MCP-1) and is currently in Phase I development for the treatment of rheumatoid arthritis.

AKU517 is a reversible acid pump antagonist developed in collaboration with Sankyo for the treatment of GERD. It is currently in Phase I. If successful, the new class of drugs may offer therapeutic advantages over existing proton pump inhibitor therapies.

Infectious Diseases

Our Infectious Disease portfolio consists of three main areas: anti-virals, anti-bacterials, and tropical medicine. We market *Famvir* for herpes and *Coartem* for malaria. Ongoing research and development efforts are focused on new specific anti-virals against Hepatitis B and C, as well as on novel antibiotics for respiratory tract infections. We established Infectious Diseases as a separate franchise following our May 2003 purchase of a majority interest in Idenix Pharmaceuticals. As a result of that transaction, we obtained certain rights to market Idenix products, as well as options to license additional Idenix products in the future.

Key Marketed Products

Coartem/*Riamet* (artemether & lumefantrine) is used in the treatment of uncomplicated Plasmodium falciparum malaria and mixed infections including Plasmodium falciparum for adults and children. *Coartem* is also used as standby emergency treatment for malaria. *Coartem* is the first fixed-dose Artemisinin Combination Therapy (ACT) of artemether and lumefantrine. It is being provided at cost by Novartis to the WHO and distributed through the WHO as part of the Roll Back Malaria initiative. *Coartem* was added to the WHO List of Essential Medicines due to its effectiveness, particularly in areas of widespread drug resistance. This product is also marketed as *Riamet* in certain countries.

Famvir (famciclovir) is used in the treatment of acute herpes zoster, recurrent genital herpes in immunocompetent patients, and recurrent mucocutaneous herpes simplex infections in HIV-infected patients.

Compounds in Development

LDT600 (telbivudine*)* and LDC300 (*valtorcitabine)* are currently in development for the treatment of Hepatitis B. We licensed the right to jointly develop these compounds with Idenix. We have also licensed the right to co-market these compounds with Idenix in the US, UK, France, Germany, Italy and Spain, and to market these compounds on our own in the rest of the world. These compounds are currently in phase III and phase II, respectively. In addition to the Hepatitis B license, Idenix also granted us an option to jointly develop Idenix's Hepatitis C drug candidate, NMC283, currently in phase I clinical trials, as well as all other subsequently developed Idenix drug candidates, upon completion of phase II clinical trials.

LBM415 is a new mode of action antibiotic (peptide deformylase inhibitor) currently in phase I development for respiratory tract infections.

Ophthalmics

We develop and market products for the treatment of a number of different ophthalmic diseases. Research and development in this disease area is aimed at the discovery and development of innovative approaches to the treatment of glaucoma, age-related macular degeneration (AMD), eye inflammation, ocular allergies and other diseases and disorders of the eye. Our aim is to focus our ophthalmics portfolio on "Back of the Eye" diseases and on "Dry Eye." Both areas are characterized by high growth and significant unmet medical needs. The "Back of the Eye" encompasses several disease areas, such as wet and dry AMD, diabetic retinopathy, retinitis pigmentosa, glaucoma (neuroprotection) and myopia. The immediate focus within "Back of the Eye" will be wet AMD where our ophthalmics business has built a leadership position with its flagship product *Visudyne*. In addition, with our recent license of Lucentis , we have secured access to a next generation treatment for AMD.

Key Marketed Products

Our Dry Eye products include a number of eye drops and gels indicated for the treatment of dry eye symptoms. *GenTeal* (hydroxypropylmethylcellulose), *Oculotect* (povidone) and *Viscotears* (carbomer) are examples of our dry eye products. These products provide relief through a tailored lubricating tear film, the composition and viscosity of which is adapted to the individual patients' needs. These products are available in more than 45 countries, including the US, EU and Japan.

Visudyne (verteporfin) is a light activated drug which is used in a two-step procedure that can be performed in a doctor's office. First, the drug is injected intravenously into the patient's arm. A non-thermal laser light is then shone into the patient's eye to activate the drug. *Visudyne* is commercially available in over 75 countries for the treatment of predominantly classic subfoveal choroidal neovascularization (CNV) caused by age-related macular degeneration. It is also approved in over 35 countries for the treatment of occult subfoveal CNV secondary to AMD (including the EU, where it gained approval in 2002). In addition, it is also approved in over 45 countries, including the EU, US and Canada, for the treatment of subfoveal CNV due to pathologic myopia (severe near-sightedness). Most recently approval was also gained in Japan for all subfoveal CNV secondary to AMD. Further geographic expansion is planned for regions including China. Visudyne is licensed from QLT.

Zaditor/Zaditen (ketotifen) is an eye drop which provides fast relief of symptoms in patients suffering from ocular allergy. *Zaditen* works through multiple mechanisms of action to provide relief within minutes and a duration of action of up to 12 hours. *Zaditen* provides rapid relief and long lasting control of allergy symptoms with a twice daily dosing regimen. *Zaditen* is approved in more than 30 countries, including the US (where it is marketed as *Zaditor*) and the EU.

Compounds in Development

Visudyne (verteporfin) is in development for additional indications. Phase III trials are ongoing in occult AMD and for minimally classic AMD.

Lucentis (ranibizumab) is a recombinant humanized high affinity antibody fragment that binds to VEGF. It is designed to penetrate the retina to decrease permeability and inhibit the formation of choroidal neovascularization, which leads to blindness in AMD patients. It is currently in phase III development for the treatment of AMD. We have licensed the right to develop and market Lucentis outside of North America from Genentech.

PIR335 (pirenzepine) ophthalmic gel is a formulation of a relatively selective M1-muscarinic antagonist. PIR335 has been used in Europe for at least 20 years. It is in phase II development for the treatment of juvenile onset of myopia.

Elidel (pimecrolimus), our Dermatology product, is also currently in phase II development for the treatment of dry eye.

AFU057A was terminated.

ABJ409A was terminated.

Principal Markets

The world market for our Pharmaceuticals Division is concentrated in the US, Europe and Japan. The following table sets forth certain data relating to our principal markets.

Pharmaceuticals	Sales 2003

Pharmaceuticals	Sales 2003	
	($ millions)	(%)
United States	6,584	41
Americas (except the United States)	1,049	6
Europe	5,374	34
Japan	1,800	11
Rest of the World	1,213	8
Total	16,020	100

Many of our Pharmaceuticals Division's products are used for chronic conditions that require patients to consume the product over long periods of time, from months to years. Sales of the vast majority of our products are not subject to material changes in seasonal demand.

Production

The key goal in our manufacturing and supply chain management program is to ensure the uninterrupted, timely and cost-effective supply of products that meet all product specifications. In order to achieve this objective, we manufacture our products at 7 bulk chemical and 17 secondary production facilities. Bulk chemical production involves the manufacture of therapeutically active compounds, mainly by chemical synthesis or by a biological process such as fermentation. Secondary production involves the manufacture of "galenical" forms of drug products such as tablets, capsules, liquids, ampoules, vials and creams. Major bulk chemical sites are located in Basel, Switzerland; Grimsby, UK; and Ringaskiddy, Ireland. Significant secondary production facilities are located in Stein, Switzerland; Wehr, Germany; Torre, Italy; Barbera, Spain; Suffern, New York; in Sasayama, Japan and in various other locations in Europe, including France, the UK and Turkey.

During clinical trials, which can last several years, the manufacturing process is rationalized and refined. By the time clinical trials are completed and products are launched, the manufacturing processes have been extensively tested and are considered stable. However, improvements to these manufacturing processes may continue throughout a product's life cycle.

While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a recall or a government-enforced shutdown of production facilities, which in turn could lead to product shortages.

Raw materials for the manufacturing process are purchased from a number of third party suppliers. Where possible, our policy is to maintain multiple supply sources so that the business is not dependent on a single or limited number of suppliers. However, our ability to do so may at times be limited by regulatory requirements. We monitor market developments that could have an adverse effect on the supply of

essential materials. All raw materials we purchase must comply with our quality standards. Overall, prices are not volatile for materially significant raw materials.

Marketing and Sales

We have invested significant resources in our Marketing and Sales organizations to achieve a competitive presence in all of the main pharmaceutical markets worldwide. In particular, Pharmaceuticals Division affiliates have a strong presence in the US and the EU.

We sell our products to wholesale and retail drug distributors, hospitals, clinics, government agencies and managed care providers. In each market, to the extent permitted by law, we deploy sales representatives to market our products and supporting medical staff to provide medical information to prescribers and healthcare purchasers. As of December 31, 2003, Pharmaceuticals Division affiliates had nearly 6,000 medical representatives in our US field forces (including contract field forces), and more than 11,000 medical representatives in the rest of the world. Our sales and marketing reach is further extended through various agreements with promotion and marketing partners, licensees, associates and distributors.

Competition

Other companies selling branded prescription pharmaceutical products include Abbott, AstraZeneca, Aventis, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck, Pfizer, Schering-Plough and Wyeth. Competition within the pharmaceutical industry is intense and extends across a wide range of commercial activities, including pricing, product characteristics, customer service, sales and marketing, and research and development.

In addition to the other pharmaceutical companies selling patented pharmaceuticals under trademarked brand names, our Pharmaceuticals Division faces an increasing challenge from companies selling generic forms of our products following the expiry of patent protection. In response to generic challenges that infringe upon our patents and trademarks, we vigorously defend our intellectual property rights. Where we have made meaningful improvements to existing products, we seek to extend the product range with patent-protected value-added line extensions. We also seek to use marketing efforts to increase brand awareness and loyalty toward our products. Ultimately, there is no guarantee that any product, even with patent protection, will remain successful if another company develops a new product offering significant improvements over existing therapies.

Research and Development

We are among the leaders in the pharmaceuticals industry in terms of research and development investment. In 2003, we invested approximately $3.1 billion in Pharmaceuticals Division research and development, which represents 19.1% of the Division's total sales. Our Pharmaceuticals Division invested $2.4 billion and $2.0 billion on research and development in 2002 and 2001 respectively. There are currently more than 75 projects in clinical development. Products expected to be launched in 2004 from our efforts include *Certican, myfortic* and *Enablex*, as well as new indications or formulations for *Diovan, Lotrel, Zometa, Zelnorm/Zelmac* and *Foradil*.

We have long term research commitments totaling $1.4 billion as of December 31, 2003, including $0.7 billion in milestone payments. We intend to fund these expenditures from internally developed resources.

The discovery and development of a new drug is a lengthy process, usually requiring 10 to 12 years from the initial research to bringing a drug to market, including six to eight years from Phase I clinical trials to market. At each of these steps, there is a substantial risk that we will not achieve our goals. In such an event, we may be required to abandon a product in which we have made a substantial investment.

Research program

The discovery of new drugs is the responsibility of our Research program. This is a complex and challenging process which is split into different phases. These phases provide tools that allow our Research team to manage and benchmark their activities. Milestones are established for each phase of the evaluation process. Candidates only advance to the next stage if defined sets of criteria are met. The primary goal of our Research program is to determine that a compound is ready for Proof of Concept in humans. In order to determine whether a compound may be tested in humans, we must invest significant resources in preclinical activities to satisfy safety requirements, including toxicology studies. Only those compounds that pass this more comprehensive series of preclinical testing (on average, about one in ten candidates) advance to the development stage of a drug's life-cycle. See " Clinical development program."

In 2003, we established the Novartis Institutes for BioMedical Research (NIBR), headquartered in Cambridge, Massachusetts, with affiliates worldwide. NIBR is redefining drug discovery in the era which began with the completion of the human genome sequence. Our strategies at NIBR include integrating previously segregated disciplines, fostering interaction among scientists, both within and outside of Novartis and investing and advancing new discovery approaches. Our goal is to produce more relevant, predictable drug discovery and new and better medicines for patients worldwide.

When completed in 2004, our Cambridge facility will contain a total of 67,500 square meters of laboratory and office space, housing over 800 scientists and technology experts, and approximately 1,000 employees in total.

All of our discovery research groups, including Functional Genomics, the Lead Discovery Center, Central Technologies and Informatics and Knowledge Management, are based at our Cambridge headquarters. Translational Research/Development, which is focused on cardiovascular disease, diabetes, infectious disease and oncology is also conducted primarily in Cambridge.

Outside of the Cambridge site, an additional 2,000 scientists and technology experts conduct research in Switzerland, Austria, the UK, Japan and various other US sites. Research is conducted in the areas of Neuroscience, Dermatology, Transplantation, Arthritis, Ophthalmology and Respiratory Disease at these sites.

Clinical development program

The testing of new drugs in humans, to determine whether they are safe and effective, is the focus of our Development program. Clinical trials of drug candidates generally proceed through three phases. In Phase I clinical trials, a drug is usually tested with about 20 to 80 normal, healthy volunteers. The tests study the drug's safety profile, including the safe dosage range. The studies also determine how a drug is absorbed, distributed, metabolized and excreted, and the duration of its action. In Phase II clinical trials, the drug is tested in controlled studies of approximately 100 to 300 volunteer patients (*i.e.,* persons with the targeted disease) to assess the drug's effectiveness and safety, and to establish a proper dose. In Phase III clinical trials, the drug is further tested on larger numbers of volunteer patients (in some cases more than 15,000 patients in total) in clinics and hospitals. In each of these phases, physicians monitor volunteer patients closely to determine the drug's efficacy and to identify possible adverse reactions. The vast amount of data that must be collected and evaluated makes clinical testing the most time-consuming and expensive part of new drug development. The next stage in the drug development process is to seek registration for the new drug. See " Regulation."

Initiatives to optimize the discovery and development process

We are working to be more efficient in selecting candidate drugs for development. For example, we are now better able to select the best compounds for development by having senior management focus on development projects at an early stage. Where possible we run early proof of concept studies in patients which include biomarkers for potential efficacy and which enable us to make an earlier evaluation of the

probability that the compound could be successfully developed into a marketable product. Under another initiative, special teams work to develop late stage products more quickly. The goal is to improve the likelihood of therapeutic and commercial success, which should reduce development costs and decrease time to market. In several other initiatives we are improving electronic management of the clinical trial processes, including data capture and transfer, as well as electronic storage and archiving of study data and documents. Most recently we have initiated electronic submissions to health authorities, vastly reducing the quantity of paper documents which need to be submitted and also enabling faster and more efficient review of data by health authorities. Overall, these initiatives have reduced clinical trial outsourcing, have improved data quality and speed of clinical trial reporting, substantially reduced the time between initial research and the introduction of the drug to market, and have provided us with considerable cost savings.

Alliances and acquisitions

Our Pharmaceuticals Division forms alliances with other industry players or academic institutions in order to develop new products, acquire platform technologies and access new markets. We license products which complement our current product line and that are appropriate to our business strategy. Therapeutic area strategies have been established to focus on alliances and acquisition activities for key disease areas/indications that are expected to be growth drivers in the future. We review products and compounds for in-licensing using the same criteria as we use for our own internally discovered drugs.

Regulation

The international pharmaceutical industry is highly regulated. Regulatory authorities around the world administer numerous laws and regulations regarding the testing, approval, manufacturing, importing, labeling and marketing of drugs, and also review the safety and efficacy of pharmaceutical products. Further controls exist on the non-clinical and clinical development of pharmaceutical products. These regulatory requirements are a major factor in determining whether a substance can be developed into a marketable product, and the amount of time and expense associated with that development.

World regulatory authorities, especially those in the US, Switzerland, the EU and Japan, have high standards of technical evaluation. The introduction of new pharmaceutical products generally entails a lengthy approval process. Of particular importance is the requirement in all major countries that products be authorized or registered prior to marketing, and that such authorization or registration be subsequently maintained. In recent years, the registration process has required increased testing and documentation for clearance of new drugs, with a corresponding increase in the expense of product introduction.

To register a pharmaceutical product, a registration dossier containing evidence establishing the quality, safety and efficacy of the product must be submitted to regulatory authorities. Generally, a therapeutic product must be registered in each country in which it will be sold. In every country, the submission of an application to a regulatory authority does not guarantee that approval to market the product will be granted. Although the criteria for the registration of therapeutic drugs are similar in most countries, the formal structure of the necessary registration documents varies significantly from country to country. It is possible that a drug can be registered and marketed in one country while the

registration authority in a neighboring country may, prior to registration, request additional information from the pharmaceutical company or even reject the product. It is also possible that a drug may be approved for different indications in different countries.

The registration process generally takes between six months and several years, depending on the country, the quality of the data submitted, the efficiency of the registration authority's procedures and the nature of the product. Many countries provide for accelerated processing of registration applications for innovative products of particular therapeutic interest. In recent years, intensive efforts have been made among the US, the EU and Japan to harmonize registration requirements in order to achieve shorter development and registration times for medical products. However, the requirement in many countries to

negotiate selling prices or reimbursement levels with government regulators can substantially extend the time until final marketing approval is granted.

The following provides a summary of the regulatory process in the principal markets served by Pharmaceuticals Division affiliates:

United States

In the US, applications for drug registration are submitted to and reviewed by the FDA. The FDA regulates the testing, approval, manufacturing, importing, labeling and marketing of pharmaceutical products intended for commercialization in the US. The FDA also monitors all pharmaceutical products currently on the US market. The pharmaceutical development and registration process is typically intensive, lengthy and rigorous. When a pharmaceutical company has gathered data which it believes sufficiently demonstrates a drug's quality, safety and efficacy, then the company may file a New Drug Application ("NDA") for the drug. The NDA must contain all the scientific information that has been gathered about the drug and typically includes information regarding the clinical experiences of all patients tested in the drug's clinical trials. A supplemental new drug application ("sNDA") must be filed for a line extension of, or new indications for, a previously registered drug.

Once an NDA is submitted, the FDA assigns reviewers from the fields of biopharmaceuticals, chemistry, medicine, microbiology, pharmacology/toxicology, statistics and labeling. After a complete review, these experts then provide written evaluations of the NDA, including a recommendation. These recommendations are consolidated and are used by the FDA in its evaluation of the NDA. Based on that evaluation, FDA then provides to the NDA's sponsor an approval, or an approvable, or non-approvable letter. The approvable and non-approvable letters will state the specific deficiencies in the NDA which need to be addressed. The sponsor must then submit complete responses to the deficiencies in order to restart the review procedure.

Once the FDA has approved an NDA or sNDA, the company can make the new drug available for physicians to prescribe. The drug owner must submit periodic reports to the FDA, including any cases of adverse reactions. For some medications, the FDA requires additional post-approval studies (Phase IV) to evaluate long-term effects or to gather information on the use of the product under special conditions. The FDA also requires compliance with standards relating to good laboratory, clinical and manufacturing practices.

European Union

In the EU, there are two main procedures for application for authorization to market pharmaceutical products in all of the EU Member States, the Centralized Procedure and the Mutual Recognition Procedure. It is also possible to obtain a national authorization for products intended for commercialization in a single EU member-state only, or for line extensions to existing national product licenses.

Under the Centralized Procedure, applications are made to the European Medical Evaluations Agency (EMEA) for an authorization which is valid across all EU member states. The Centralized Procedure is mandatory for all biotechnology products and optional for other new chemical compounds or innovative medicinal products. When a pharmaceutical company has gathered data which it believes sufficiently demonstrates a drug's quality, safety and efficacy, then the company may submit an application to the EMEA. The EMEA then receives and validates the application, and appoints a Rapporteur and Co-Rapporteur to review it. The entire review cycle must be completed within 210 days, although there is a "clock stop" at day 120, to allow the company to respond to questions set forth in the Rapporteur/Co-Rapporteur's Assessment Report. When the company's complete response is received by the EMEA, the clock restarts on day 121. If there are further aspects of the dossier requiring clarification, the EMEA will then request an Oral Explanation on day 180, in which the sponsor must appear before the EMEA's Scientific Committee (the CPMP) to provide the requested additional information. On day 210, the

CPMP will then take a vote to recommend the approval or non-approval of the application. The final decision under this Centralized Procedure is an EU Community decision which is applicable to all Member States. This decision occurs on average 90 days after a positive CPMP recommendation.

Under the Mutual Recognition Procedure (MRP), the company first obtains a marketing authorization by a single EU member-state. Subsequently, the company may seek mutual recognition of this first authorization from some or all of the remaining EU Member-States. Then, within 90 days of this initial decision, each Member State reviews the application and can issue objections or requests for additional information. On Day 90, each Member State must be assured that the product is safe and effective, and that it will cause no risks to the public health. Once agreement has been reached, each Member State grants separate marketing authorizations for the product.

After the Marketing Authorizations have been granted, the company must submit periodic safety reports to the EMEA (Centralized Procedure) or to the National Health Authorities (MRP). These Marketing Authorizations must be renewed on a 5 year basis.

Japan

In Japan, applications for new products are made through the Pharmaceutical and Medical Devices Evaluation Center (PMDEC). After a data reliability survey and a Good Clinical Practice inspection are carried out by the Organization for Pharmaceutical Safety and Research, a team evaluation is passed to the Central Pharmaceuticals Affairs Council (CPAC), whose special members, committees and executive committees provide a report back to the PMDEC. After a further team evaluation, a report is provided to the Ministry of Health, Labor and Welfare (MHLW), which makes a final determination for approval and refers this to the CPAC which then advises the MHLW on final approvability. Drug manufacturing or import license approval is issued by the local prefecture government. Once the MHLW has approved the application, the company can make the new drug available for physicians to prescribe. For some medications, the MHLW requires additional post-approval studies (Phase IV) to evaluate safety, effects and/or to gather information on the use of the product under special conditions. The MHLW also requires the Sponsor to submit safety reports.

Price Controls

In many of the markets where we operate, the prices of pharmaceutical products are subject to direct price controls (by law) and to drug reimbursement programs with varying price control mechanisms. Due to increasing political pressure and governmental budget constraints, we expect these mechanisms to remain in place and to perhaps even be strengthened and to have a negative influence on the prices we are able to charge for our products.

In the US, debate over the reform of the healthcare system has resulted in an increased focus on pricing. Although there are currently no government price controls over private sector purchases in the US, federal legislation requires pharmaceutical manufacturers to pay prescribed rebates on certain drugs to enable them to be eligible for reimbursement under some government healthcare programs. In the absence of government pricing regulations, managed care has become a potent force in the US market place that increases downward pressure on the prices of pharmaceutical products. In addition, the recently enacted Medicare reform legislation, which creates a prescription drug benefit for Medicare patients, could influence prices. The legislation could ultimately enable the US government to use its enormous purchasing power to demand additional discounts from pharmaceutical companies. At the same time, this legislation could increase the volume of pharmaceutical drug purchases, perhaps offsetting, at least in part, potential additional price discounts. It is too soon to predict the full impact of this new legislation with certainty. Another potential influence on pricing in the US is the ongoing efforts by consumers and others to obtain our products from distributors in Canada, which has relatively stringent price controls. Such imports from Canada to the US are currently illegal. However, there are ongoing political efforts to change the legal status of such imports.

In the EU, governments influence the price of pharmaceutical products through their control of national healthcare systems that fund a large part of the cost of such products to consumers. The downward pressure on healthcare costs in general in the EU, particularly with regard to prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert commercial pressure on pricing within a country. The expected EU enlargement (with 10 countries expected to join the EU in 2004) will probably complicate the environment and have some influence on prices in the region and parallel trade.

In Japan, the MHLW reviews the prices of individual pharmaceutical products every two years. In the past, these reviews have resulted in price reductions. The Japanese government is currently undertaking a healthcare reform initiative, and the pharmaceutical pricing system is one

of the issues being reviewed. In particular, the government is reviewing the pricing of older products, including the biannual reduction of reimbursement prices adjusted for actual discounts given. The government has abandoned the previously proposed reference price system. These efforts on the part of the government may well lead to substantial reforms of the Japanese healthcare system in the near future. Such reforms likely would include additional price control mechanisms, and would place additional pressure on the prices charged for pharmaceutical products.

Intellectual Property

We attach great importance to patents, trademarks, and know-how in order to protect our investment in research and development, manufacturing and marketing. It is our policy to seek the broadest possible protection for significant product developments in all major markets. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen.

The protection offered by such patents extends for varying periods depending on the legal life of patents in the various countries. The protection afforded, which may also vary from country to country, depends upon the type of patent and its scope of coverage. We monitor our competitors and vigorously challenge infringements of our intellectual property.

In general, published pharmaceutical industry benchmarks show that we are at a comparatively low risk of loss of significant amounts of revenue due to patent expirations. As examples, we have basic patent protection (including extensions) on valsartan (the active ingredient used in our best-selling product *Diovan*) until 2012 in the US, until 2011 in the major countries of the EU, and until 2013 in Japan. We have basic patent protection (including extensions) on imatinib (the active ingredient used in our leading product *Gleevec/Glivec*) until 2013 (with an extension until 2015 applied for), until 2016 in the major EU countries, and until 2013 in Japan.

However, patent protection is no longer available in several major markets for the active substances used in a number of our Pharmaceuticals Division's leading products:

Neoral. Patent protection exists for the *Neoral* micro-emulsion formulation and other cyclosporin formulations through 2009 and beyond in major markets. Despite this protection, generic cyclosporin products competing with *Neoral* have entered the transplantation market segment in the US, Germany, Japan and elsewhere. We have filed patent infringement actions against manufacturers of these generic products. However, despite a finding of infringement and an award of damages against one of these manufacturers in the US, we have so far not succeeded in obtaining an injunction, or a final judgment of damages against any of the manufacturers we have sued.

Sandostatin. Basic patent protection for *Sandostatin SC* has expired in the US, Japan, Germany and the UK, and it will expire in 2006 in France and 2007 in Italy. However, patent protection

extending to 2010 (and 2013 and beyond in the US) continues in major markets for *Sandostatin LAR*, which represents a significant and growing proportion of our octreotide sales.

Lotrel/Cibacen/Lotensin/Cibadrex. The basic benazepril substance patent protection for *Cibacen/Lotensin/Cibadrex* expired in Japan in 2002 and will expire in the US in February 2004, and in 2004-08 in major markets in the EU. However, *Lotrel,*which is a combination of benazepril with amlodipine, is patented in the US until 2017. Dr. Reddy's Laboratories has challenged this patent, as well as other patents related to *Lotrel*, in a lawsuit filed in December 2003. Dr. Reddy's is seeking marketing approval for a different benazepril combination, using amlodipine maleate, rather than amlodipine besylate. Because of this difference, the Dr. Reddy's product, if brought to market, would not be automatically substitutable in the US for *Lotrel*. Nonetheless, we will take all appropriate measures to enforce our patent rights.

Lamisil. The active ingredient in *Lamisil* is specifically disclosed and covered in a patent family which will expire in 2006 in the US, and in 2004-07 in Japan and in major EU countries. The specific US patent is being challenged by Dr. Reddy

Laboratories. The active ingredient in Lamisil is also covered (but not specifically disclosed) in the general scope of a US patent expiring in July 2004. That patent is directed to a broad chemical class of antifungal compounds.

Miacalcin/Miacalcic. The specific Novartis formulation of this product is covered by patents which will expire in the US in 2015. However, patents on the Novartis formulation have expired in a number of major countries in 2003, and will expire in Italy in 2006. Apotex has applied to the FDA for the right to sell a generic version of *Miacalcin*, using the Novartis formulation. We have sued Apotex for infringement. Another company has applied to the FDA for the right to sell a generic version of *Miacalcin* based on a different formulation. We have not sued this company.

Voltaren. *Voltaren* is off-patent. As a result, revenue from *Voltaren* has declined and may decline significantly further over the next few years.

The loss of patent protection can have a significant impact on our Pharmaceuticals Division. We work to offset these negative effects by developing and patenting inventions that result in process and product enhancements and by positioning many of our products in specific market niches. However, there can be no assurance that this strategy will be effective in the future to extend competitive advantage, or that we will be able to avoid substantial adverse effects from future patent expirations.

CONSUMER HEALTH

The business of our Consumer Health Division is conducted by a number of affiliated companies throughout the world. The Consumer Health Division consists of the following Business Units: Sandoz generics, OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby, and CIBA Vision. Each Business Unit is a world leader in the research, development, manufacturing and marketing of high quality health-related products. As of December 31, 2003, the affiliates of the Consumer Health Division employed 32,464 associates worldwide. In 2003, the affiliates of the Consumer Health Division achieved consolidated sales of $8.8 billion, which represented 36% of the Group's total sales.

SANDOZ

Our Sandoz generics Business Unit is a world leader in the development, manufacture and marketing of pharmaceutical products and substances which are no longer protected by patents. The business of our Sandoz generics Business Unit is conducted by a number of affiliated companies in more than 120 countries. As of December 31, 2003, our Sandoz generics Business Unit employed 12,918 associates worldwide. In 2003, the affiliates of Sandoz generics achieved consolidated sales of $2.9 billion, which represented 12% of the Group's total sales.

In May 2003, we united 14 of our generics company brands under the single global umbrella name *Sandoz*, to strengthen recognition and leverage share of voice in the highly competitive marketplace for generics products. This initiative capitalizes on the strong reputation of the *Sandoz* name, which has a high level of awareness and trust among physicians, pharmacists and patients.

The Sandoz Business Unit competes in three principal product segments: finished dosage forms (the Generic Pharmaceuticals Business), active pharmaceutical ingredients and their intermediates (the Industrial Business) and biopharmaceuticals (the Biopharmaceuticals Business). In the Generics Pharmaceuticals Business, we develop and manufacture drugs that are no longer protected by patents into finished dosage forms, and we sell them to pharmacies, hospitals and other healthcare outlets around the world. In the Industrial Business, we manufacture active ingredients for pharmaceutical and biotechnological substances, and their intermediates, and sell them to customers who use them to manufacture finished goods. In developing our new Biopharmaceuticals Business, we are seeking to leverage our technology and expertise to develop, manufacture and market high-quality biopharmaceutical products, such as protein hormones and other human proteins, to be sold as generic substitutes for branded biopharmaceutical products after their patents have expired. Sandoz is also an important manufacturer of biopharmaceuticals for a number of third parties.

Approximately 79% of our Sandoz sales are derived from our Generic Pharmaceuticals Business, approximately 19% of sales are derived from our Industrial Business and approximately 2% are attributable to the Biopharmaceuticals Business.

In 2003, Sandoz sales grew by approximately 47% in local currencies. The business year was characterized by strongly developing US sales, the integration of Lek Pharmaceuticals d.d., a Slovenian pharmaceutical company which we had acquired at the end of 2002, and the

successful launch of new products, including the US launch of omeprazole (a generic version of the ulcer and heartburn treatment Prilosec®).

In the US, our Sandoz sales increased by 56% mainly driven by the strong sales of amoxicillin/potassium clavulanate (a generic version of the antibiotic Augmentin®) and loratadine (a generic version of the allergy treatment Claritin®).

In Germany, the second most important market for our Sandoz products, the introduction of new regulations intended to increase competition and our ongoing efforts to restructure our German operations reduced profitability growth at our affiliate there. In key European markets we achieved double-digit sales growth. These markets included the UK, France, Italy, the Netherlands, Spain and Austria.

With the acquisition of Lek, Sandoz is now a major supplier of generic pharmaceutical products in Central and Eastern Europe and in the former Soviet Union. Lek manages a wide ranging business portfolio, with anti-infectives, cardiovascular and gastrointestinal tract products. For the time being, Lek products will continue to be sold throughout the world under that well-regarded name.

In 2003, our Industrial Business achieved improved performance in active ingredients (penicillins, cephalosporin and intermediates) as a result of increased penicillin productivity. This led to increased sales volumes, a shift to high-value compounds for cephalosporin antibiotics and additional long-term contracts with major pharmaceutical and biotech companies.

In 2003, our Biopharmaceuticals Business continued to work on the development of biologic products which are comparable to biotech originator products, leveraging 20 years of biotech expertise. In building a portfolio of these products Sandoz is at the forefront of this new class of biotech products.

Recently Launched Products

The following is a summary of the most important products launched by Sandoz in 2003.

Omeprazole (a generic version of Prilosec®, an ulcer and heartburn treatment) was launched in the US in August 2003. In Europe, omeprazole was launched in Denmark, Sweden and Finland in April 2003.

Fosinopril (a generic version of Monopril®, an ACE Inhibitor) was launched in the US in December 2003.

Simvastatin (a generic version of Zocor®, a cholesterol and triglyceride reducer) was launched in Germany, the UK and the Netherlands in May 2003.

Fluconazole (a generic version of Diflucan®, an antifungal treatment) was launched in the Netherlands in March 2003.

Norfloxacin (a generic version of Noroxin®, an antibiotic) was launched in Italy in August and in France in October 2003.

Citalopram (a generic version of Celexa®/Cipramil®, an antidepressant and mood stabilizer) was launched in Austria in April 2003, and in Scandinavia and the Netherlands in January 2003.

Lisinopril (a generic version of Zestril®, an ACE inhibitor) was launched in Sweden in August 2003.

Amoxicillin/clavulanic acid (a generic version of the antibiotic Augmentin®) was launched in the Slovakian Republic in January and the Russian Federation in June 2003 by Lek.

Clarithromycin (a generic version of Klacid®) was launched in Poland in June 2003 by Lek.

Key Marketed Products

The following table describes the key marketed products for our Sandoz generics Business Unit. Not all products are available in all markets.

Product	Description

Generic Pharmaceuticals Business

Product	Originator Drug	Description
Amoxicillin/clavulanic acid	Augmentin®	anti-infective
Omeprazole	Prilosec®	ulcer and heartburn treatment
Citalopram	Celexa®	anti-depressant
loratadine	Claritin®	antihistamine
Atenolol	Tenoric®	anti-hypertension
Penicillin		anti-infective
Lisinopril	Prinivil®	ACE inhibitor
Ranitidine	Zantac®	anti-ulcerant
Metformin	Glucophage®	anti-diabetic
Terazosin	Hytrin®	anti-hypertension and benign prostatic hyperplasia
Enalapril	Lexxel®	ACE inhibitor
Simvastatin	Zocor®	cholesterol and trigyceride reducer

Industrial Business

Active Ingredient	Description
Penicillin V (Phenoxymethylpenicillin): various forms	Anti-infectives
Penicillin G (Benzylpenicillin): various salts	Anti-infectives
Semisynthetic Penicillins, various active ingredients	Anti-infectives
Cephalosporins: various active ingredients	Anti-infectives
ß-Lactamase Inhibitor and Blends: clavulanic acid, various forms	Anti-infectives
Macrolides, various active ingredients	Anti-infectives
ß-Lactam Intermediates for penicillins, cefalosporin, makrolides	Anti-infectives
Pankreatin, Heparin, Thyronine	Enzymes
Thyroxine	Hormones

Principal Markets

The principal markets of our Sandoz generics Business Unit are the two largest generics markets in the world: the US and Europe. The following table sets forth the aggregate 2003 sales of Sandoz by region:

Sandoz	Sales 2003	
	($ millions)	(%)
United States	1,098	38
Americas (except the United States)	150	5
Europe	1,266	44
Rest of the World	392	13
Total	**2,906**	**100**

Many of our Sandoz generics Business Unit's products are used for chronic conditions that require patients to consume the product over long periods of time, from months to years. Sales of the vast majority of our products are not subject to material changes in seasonal demand.

Production

We manufacture our Sandoz products at more than 20 production facilities around the world. Among these, our principal production facilities are located in Kundl and Schaftenau, Austria; Menges and Ljubljana, Slovenia; Broomfield, Colorado; Stryków, Poland and Kalwe, India. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a recall or a government-enforced shutdown of production facilities, which in turn could lead to product shortages.

We obtain agricultural raw materials such as flours and sugars from multiple suppliers based in both the US and the EU. We obtain chemicals and other raw materials from suppliers around the world. The raw materials we purchase are generally subject to market price fluctuations. We seek to avoid these fluctuations, where possible, through the use of long-term supply contracts. In addition, several of our Sandoz generics affiliates use e-procurement systems to further strengthen their purchasing productivity.

We produce biotech substances like enzymes for detergents, and many of the active pharmaceutical ingredients, like penicillins, using modern bio-technological methods. These methods include fermentation processes, chemical syntheses and physical production methods, such as sterile precipitation. We are constantly working to develop other new manufacturing processes.

Marketing and Sales

In our Generics Pharmaceuticals Business, we have a broad portfolio of off-patent drugs that we sell to pharmacies, hospitals, and other healthcare outlets. Depending on the structure of the local market, customers are serviced either by the field service team of the local Sandoz affiliate or by established partners or joint venture associates.

In our Industrial Business, we sell active pharmaceutical ingredients and biotech substances to manufacturers in the pharmaceutical industry.

In response to rising healthcare costs, many governments and private medical care providers, such as health maintenance organizations (HMOs), have instituted reimbursement schemes that favor the substitution of generic pharmaceuticals for more expensive brand-name pharmaceuticals. In the US, generic substitution statutes have been enacted by virtually all states and permit or require the dispensing pharmacist to substitute a less expensive generic drug for the brand-name version of the drug. In Europe, the use of generic drugs is growing. But in some EU countries, reimbursement practices do not create an efficient incentive for generic substitution. As a result, generic penetration rates in many European countries are still below those reached in the US.

Competition

Other companies selling finished dosage form generic pharmaceutical products are Alpharma, Barr, Dr. Reddy's, Hexal, Ivax, Merck Generics, Mylan, Ranbaxy, Ratiopharm, Stada, Teva, and Watson.

Other companies selling active pharmaceutical ingredients & intermediates are Antibioticos, Dr. Reddy's, DSM-Anti-Infectives, Ranbaxy and Teva, as well as certain East Asian manufacturers.

The market for generic products is characterized by increasing demand for high-quality pharmaceuticals which can be produced at lower costs due to minimized initial research and development investments. Increasing pressure on healthcare expenditures and numerous patent expirations have created a favorable market environment for the generics industry. This positive market trend, however, brings increased competition within the generics industry, leading to ongoing price pressure on generic pharmaceuticals.

Research and Development

Before a generic drug may be marketed, intensive development work must be performed in order to demonstrate the bioequivalency of the generic drug to the original branded drug. Nevertheless, research and development costs associated with generic drugs are much lower than those of their original counterparts. As a result, off-patent drugs can be offered for sale at prices much lower than those of patented drugs, which must recoup substantial basic research and development costs through higher prices over the life of the product's patent.

Currently, the affiliates of our Sandoz generics Business Unit employ about 750 researchers and developers who explore alternative routes for the manufacture of known compounds and who aim to develop innovative forms of generic drugs. These associates are based worldwide, including facilities in Kundl and Schaftenau, Austria; Menges and Ljubljana, Slovenia; Kolshet, India and Dayton, New Jersey.

In 2003, our Sandoz generics Business Unit invested $263 million in research and development, which amounted to 9.1% of sales. We have long-term research commitments totaling $13 million in the aggregate as of December 31, 2003. We intend to fund these expenditures from internally generated resources.

Regulation

The Waxman-Hatch Act in the US (and similar legislation in the EU and in other countries) eliminated any requirement that generic drug manufacturers repeat the extensive clinical trials which are

required for originator drugs, so long as the generic version could be shown to be of identical quality and purity, and to be biologically equivalent to the original branded drug.

In the US, the decision whether a generic drug is bioequivalent to the original branded drug is made by the FDA based on an Abbreviated New Drug Application (ANDA) filed by the generic drug's manufacturer. The process typically takes approximately eighteen months from the filing of the ANDA until FDA approval. However, delays can occur if issues arise regarding the interpretation of bioequivalence study data, labeling requirements for the generic product, or qualifying the supply of active ingredients. In addition, the Waxman-Hatch Act requires a generic manufacturer to certify in certain situations that the generic drug does not infringe any current applicable patents on the drug held by the innovator, or to certify that such patents are invalid. This certification often results in a patent infringement lawsuit being brought by the innovator against the generic company. In the event of such a lawsuit, the Waxman-Hatch Act imposes an automatic 30-month delay in the approval of the generic drug in order to allow the parties to resolve the intellectual property issues.

In the EU, decisions on bioequivalence can be made by the EMEA under the Centralized Procedure, or by a single member state, after which the MRP may be followed. See "Pharmaceuticals Regulation European Union." Companies may submit Abridged Applications for approval of a generic pharmaceutical product, based upon its "essential similarity" to a medicinal product authorized and marketed in the EU for not less than ten years.

Intellectual Property

Wherever possible our products are protected by our own patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

We take all reasonable steps to ensure that our generic products do not infringe valid intellectual property rights held by others. Nevertheless, originating companies commonly assert patent and other intellectual property rights in an effort to delay or prevent the launch of competing generic products. As a result, we can become involved in extensive litigation regarding our generic products. If we are unsuccessful in defending these suits, we could be subject to injunctions preventing us from selling our generic products, or to damages, which may be substantial.

In one significant example, we were involved in a series of lawsuits brought by GlaxoSmithKline (GSK) regarding amoxicillin/potassium clavulanate, our generic version of GSK's Augmentin®. We launched the first generic version of this GSK product in the US in July 2002, following favorable decisions by the United States District Court for the Eastern District of Virginia invalidating seven patents alleged by GSK to cover its Augmentin® product. In November 2003, the District Court's decision was affirmed on appeal by the US Court of Appeals for the Federal Circuit.

GSK had also initiated actions against us in state court in Colorado and before the US International Trade Commission, alleging that the potassium clavulanate used in manufacturing our product is produced using a trade secret allegedly stolen from GSK. In July 2003, we reached an agreement with GSK on this issue. Under the terms of the agreement, GSK will receive single-digit percentage royalties on US sales of generic versions of Augmentin® sold by us for the four-year period from July 2002 through June 2006.

We are currently involved in litigation in a number of countries with affiliates of AstraZeneca regarding omeprazole, our generic version of AstraZeneca's Priolosec®. We launched omeprazole in the US in August 2003. These cases are generally in their early stages. We believe that we will be successful in these lawsuits. However, should AstraZeneca succeed in any or all of the lawsuits, then AstraZeneca will

likely seek to recover from us its lost profits for sales it would have made had our product not been on the market.

OTC

Our Over-the-Counter (OTC) self medication Business Unit is a world leader in the research, development, manufacturing and marketing of products for the treatment and prevention of common medical conditions and ailments, to enhance people's overall health and well being. The business of our OTC Business Unit is conducted by a number of affiliated companies in more than 50 countries. As of December 31, 2003, the affiliates of our OTC Business Unit employed 3,920 associates worldwide. In 2003, the affiliates of our OTC Business Unit achieved consolidated sales of $1.8 billion in sales, which represented 7% of the Group's total sales.

Key Marketed Products

The OTC Business Unit's main product categories are cough, cold and allergy treatments, gastrointestinal treatments, dermatological treatments, analgesics, vitamins, minerals and supplements, venous disorder treatments and smoking cessation treatment. The major OTC brands are:

Key brands	Market/segment
Nicotinell/Habitrol	Smoking cessation
Voltaren Emulgel	Topical muscle pain
Sandoz	Minerals
Lamisil[AT] *Cream*	Athlete's foot treatment
Otrivin	Nasal decongestant
Triaminic	Pediatric cough & cold
NeoCitran/TheraFlu	Cold remedies and flu
Maalox	Antacid
Ex-Lax	Laxative
Gas-X	Anti gas
Benefiber/NovaFibra	Fiber supplements
Fenistil	Wound healing

In 2003, the OTC Business Unit had a number of key brand and marketing achievements:

Lamisil, the one week treatment for athlete's foot, had strong sales growth of 17%, led by Latin America (+70%) and Asia (+33%).

Voltaren Emulgel, a topical analgesic for muscle pain and the largest OTC brand in our portfolio, strengthened its number 1 global position in sales within the topical analgesics category by growing 11% and achieving a nearly 24% share of the category's sales in the countries where the product is available, according to the most recent available data.

Nicotinell/Habitrol, our smoking cessation franchise, increased sales by 35% over 2002 driven by the successful roll-out of consumer-preferred chewing gum products and by private label gains in Europe and Asia.

We launched several innovative new products or formulations, including *Voltaren* Patches in certain countries in Western Europe. The introduction of this new form contributed to the strong *Voltaren* performance.

We acquired the *Tenalf* and *Alvium* brands in Mexico, further strengthening OTC's position in the Mexican cough, cold and allergy segment. Novartis OTC began selling these brands in July 2003.

OTC launched a private label loratadine product in the US market, through close collaboration with our Sandoz generics Business Unit. The launch, which began in February 2003, posted dynamic sales through the Hatch-Waxman exclusivity period.

Principal Markets

In 2003, OTC realized the majority of its sales in its two principal markets: the US and Europe, including Eastern Europe. In 2002, the OTC Business Unit and Kao Corporation agreed to end their joint venture to market OTC products in Japan. However, OTC remains committed to expanding its presence in the Japanese market. The following table sets out our 2003 sales by geographic region.

OTC	**Sales 2003**	
	($ millions)	**(%)**
United States	531	30
Americas (except the United States)	170	10
Europe	890	50
Rest of World	181	10
Total	**1,772**	**100**

The OTC business is marked by a high degree of seasonality, with our cough, cold and allergy brands including *Triaminic*, *NeoCitran/Theraflu* and *Tavist* heavily influenced by the timing and severity of the annual cold and flu season and allergy seasons.

Production

Our OTC Business Unit has a manufacturing and supply infrastructure comprised of the Business Unit's own plants, strategic third parties and other Novartis Group plants (which are predominantly owned and operated by the Pharmaceuticals Division). The primary OTC plants are located in Lincoln, Nebraska; Nyon, Switzerland and Humacao, Puerto Rico.

The goal of our supply chain strategy is to produce and distribute high quality products in an efficient manner. Our balance of internal, external and Group sites provides flexibility and predictable sources of supply in the event of capacity constraints or other potential disruptions to supply. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a recall or a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

Raw materials for the manufacturing process are purchased from a number of our affiliates and third party suppliers. For the most part, the products and services we procure are not proprietary and are available from a number of suppliers. We often "single-source" supplies, but we have a policy of having at least a second approved and validated supplier registered for most key materials so that substitution is possible. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials.

Marketing and Sales

We aim to be a leading global participant in fulfilling the needs of patients and consumers for self-medication healthcare. Strong brands, science-based products and in-house marketing and sales organizations are key strengths in pursuing this objective. We distribute our products through various channels, such as pharmacies, food, drug and mass retail outlets.

Competition

The fundamental trends driving the growth of our OTC business are increasing pressures on government health funding, changing consumer attitudes towards personal well being, the rise of a self-care mentality among consumers and successful switches of prescription products to OTC status. Other companies selling over-the-counter pharmaceutical products include major international corporations with substantial financial and other resources, such as Aventis, Bayer, GlaxoSmithKline, Johnson & Johnson, Roche, Pfizer, Procter & Gamble and Wyeth.

Research and Development

In OTC, the focus of research and development activities is primarily on dermatology, analgesics, cough, cold, allergy, gastrointestinal, minerals, and cardiovascular risk reduction (through smoking cessation programs). OTC also works closely with the Pharmaceuticals Division to evaluate appropriate products that can be switched from prescription to OTC status. The development of line extensions to leverage brand equities is also of high importance. These extensions can take many forms including new flavors, new galenical forms and more consumer-friendly packaging.

The OTC business employs close to 200 associates in Research and Development with the primary facility located in Nyon, Switzerland. Local country Research and Development organizations largely manage compliance, regulatory needs and medical affairs. In 2003, the OTC Business Unit spent $75 million in Research and Development, representing approximately 4.2% of net sales.

Regulation

For OTC products, the regulatory process for bringing a product to market consists of preparing and filing a detailed dossier with the appropriate national or international registration authority and obtaining approval in the US or registration in the EU and the rest of the world. See "Pharmaceuticals Regulation."

In the US, in addition to the NDA process which is also used to approve prescription pharmaceutical products, an OTC product may be sold if the FDA has determined that the product's active ingredient is generally recognized as safe and effective. FDA makes this determination through a regulatory process known as the OTC Review. In the OTC Review, the FDA establishes, in a series of monographs, the conditions under which particular active ingredients may be recognized as safe and effective for OTC use. Pharmaceutical companies can market products containing these active ingredients without the necessity of filing an NDA and going through its formal approval process, so long as the company complies with the terms of the published monograph.

Most countries also have a regulatory process for switching a particular pharmaceutical product from prescription to OTC status. These processes vary from country to country.

Intellectual Property

Our OTC business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Enforceable trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

ANIMAL HEALTH

Our Animal Health Business Unit is a world leader in the research, development, manufacturing and marketing of products and services to save, prolong and improve animal lives. The business of our Animal Health Business Unit is conducted by a number of affiliated companies in 39 countries. As of December 31, 2003, the affiliates of Animal Health employed 2,193 associates worldwide. In 2003, the affiliates of Animal Health achieved consolidated sales of $682 million, which represented 3% of the Group's total sales.

Animal Health researches, develops, manufactures and markets a wide range of products for both companion and farm animals including farmed fish. In 2003, the companion animal segment accounted for 52% of our total Animal Health sales and the farm animal business, including Vaccines and Aqua Health, accounted for 48%. Our Animal Health products include parasiticides, antimicrobials, vaccines and veterinary pharmaceuticals. Our Animal Health business has a dedicated research and development team, which benefits from synergies with other Novartis businesses, most notably, research in the Pharmaceuticals Division.

We acquired Grand Laboratories Inc. and ImmTech Biologics Inc. in the US in January 2002 for a combined minimum purchase price of $99 million. The final price may increase depending on whether certain future sales and other targets are met. These businesses specialize in the development, manufacture and marketing of vaccine products for cattle and pigs. Through these acquisitions we increased the share of vaccines to 8% of the Business Unit's total sales in 2003, strengthened our position in the vaccines market and established our presence in the US farm animal segment.

2003 was characterized by an expansion of our product range, with new products contributing 6% to total annual sales. This range rejuvenation included new product introductions, geographical extensions, new indications for existing products, and the phase out of non-strategic brands. In parallel, our investments in Marketing & Sales and Research & Development were increased over 2002 to exploit the existing portfolio.

In July 2003, we announced a new organizational structure for our Animal Health Business Unit. We have divided our Animal Health business geographically into four Regions North America, Latin America, Europe and Asia Pacific and have moved operational responsibilities from our head office to offices in each of these regions, in order to be closer to our markets.

Recently Launched Products

Product	Description	Registration/Launch Status
Companion and Farm Animals		
Agita	Farm fly control	Launched in 14 countries in Europe, Asia Pacific and Latin America
Atopica	Treatment of atopic dermatitis in dogs	launched in the US, UK and Italy and registered in the other EU countries
Deramaxx	First COX-2 inhibitor approved for pain control in dogs	Approval of chronic pain control claim was received in the US in February 2003 with launch in the same month
Fortekor	Congestive Heart Failure in dogs, Chronic Renal Insufficiency in cats	New product form palatable to cats introduced in UK and Switzerland
Milbemax	Intestinal worm control in dogs and cats	Geographical expansion to 11 additional countries, primarily in Europe
Sentinel Spectrum	Prevention of heartworm and control of intestinal worms and fleas	Launched in Australia

Product	Description	Registration/Launch Status
Vaccines and Aqua Health		
Coxabic	Coccidia vaccine in poultry breeders	Launched in South Africa
Vaccine line extension in US	Cattle, pig and equine vaccines	5 new products and 2 new indications were launched in the US
Vaccine line extension in Aqua Health	Vaccines for salmon and trout	3 vaccines launched in Chile, 1 in Canada and 5 in Europe
Vaccines geographical expansion	Pig vaccines against respiratory and enteric diseases	Existing vaccine range was introduced in Brazil and Southeast Asia countries
Pyceze	Control of fungal infections in fish and fish eggs	Pyceze, the only authorized treatment to replace products now banned, was introduced in 3 EU countries and Chile

Key Marketed Products

Products	Description
Companion Animals	
Deramaxx	Control of osteoarthritis pain, postoperative orthopedic pain and inflammation in dogs
Fortekor	Treatment of congestive heart failure in dogs and chronic renal insufficiency in cats
Interceptor	Prevention of heartworm and intestinal worms
Milbemax	Control of intestinal worms in cats and dogs
Program	Control of fleas in dogs and cats
Sentinel	Prevention of heartworm and control of fleas and intestinal worms in dogs
Farm Animals	
Clik/Vetrazin	Prevention of blowfly strikes in sheep
Endex	Treatment and control of liver fluke and gastro-intestinal worms in cattle and sheep
Fasinex	Treatment and control of liver flukes in cattle and sheep
Tiamutin, Econor	Treatment of bacterial infections in pigs and poultry
Vaccines and Aqua Health	
Betamax, Excis	Treatment and control of salmon lice
Birnagen Forte, Furogen	Prevention of infectious pancreatic necrosis in farmed salmon

Products	Description
Bovidec	Prevention of bovine viral diarrhea in cattle
Fusogard	Prevention of foot rot and liver abscess control in cattle
Pyceze	Treatment and control of fungal infections in fish and fish eggs
Scourbos, Somnustar	Prevention of enteric disease in cattle
Virashield	Prevention of respiratory disease in cattle

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Principal Markets

Products for companion animals are sold predominantly in North America, the EU, Australia and Japan. In most other countries, sales of farm animal products dominate. The following table sets out 2003 total sales of our Animal Health products by region:

Animal Health	Sales 2003	
	($ millions)	(%)
United States	255	38
Americas (except the United States)	83	12
Europe	219	32
Rest of the World	125	18
Total	**682**	**100**

Pharmaceutical and biological product sales in all of our main Animal Health businesses (aqua, farm and companion animals) fluctuate seasonally, and can be significantly affected by climatic and economic conditions, and by changing health or reproduction rates of animal populations.

Production

Approximately 80% of our production volume is manufactured by third parties, including Novartis affiliates in other Business Units. Animal Health has production facilities of its own located around the world, with main sites in WUSI-Farm, China; Dundee, Scotland and Braintree (UK); Larchwood, Iowa and Huningue, France.

The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

We obtain our raw materials from sources around the world. We depend to a large extent on suppliers for the raw materials, intermediates and active ingredients. We make use of long term supply agreements to limit the volatility of prices charged to us for raw materials.

Marketing and Sales

Our products are predominantly prescription-only treatments for animals. The major distribution channels are veterinarians and wholesalers of veterinary products. Primary marketing efforts are targeted at veterinarians using such marketing tools as printed materials, direct mail, advertisements and articles in the veterinary special press, our participation at conferences for veterinarians and the organization of special educational events, focusing primarily on new treatment areas. In addition, we engage in general public relations activities, including media advertisements and other direct advertisements of brands, to the extent permitted by law in each country.

Competition

Other companies selling veterinary pharmaceutical products for companion and farm animals are Bayer, Elanco, Fort Dodge (Wyeth), Intervet (Akzo Nobel), Merial, Pfizer, and Schering-Plough. Most of these companies offer a broad range of products for both companion and farm animals, and their marketing efforts are at a comparable level to ours.

Research and Development

Novartis Animal Health has dedicated research facilities in Switzerland and Australia for antiparasitics. In the US, UK and Canada, we focus on the development of new vaccines for farm animals and farmed fish. In 2003, we stepped up our investment into development projects, devoting $73 million to research and development. This amount represented 10.7% of total sales.

In these efforts, we use high-capacity, in-vitro micro-screening to assess a large number of natural products and synthetic chemicals for bioactivity. Our researchers exploit synergies with other Novartis businesses and also collaborate with external partners to develop veterinary treatments. Drug delivery projects, some in collaboration with external partners, concentrate on our key treatment areas and aim to improve efficacy and ease of use.

We have long-term research commitments totaling $5 million in the aggregate as of December 31, 2003. We intend to fund these expenditures from internally generated resources.

Regulation

The registration procedures for animal medicines are similar to those for human medicines. An animal drug application for product registration must be accompanied by extensive data on residue and food safety, target animal safety, environmental effects, efficacy in laboratory and clinical studies as well as information on manufacturing, quality control and labeling.

In the US, animal health products are generally regulated by the FDA's Center for Veterinary Medicine. Certain product categories are regulated by the Environmental Protection Agency (EPA), and vaccines are under the control of the US Department of Agriculture (USDA).

In the EU, veterinary medicinal products need marketing authorization from the competent authority of a member-state (national authorization) or through a community procedure, which is either the Centralized Procedure or the MRP. See "Pharmaceuticals Regulation."

In Japan, veterinary medicinal products are approved by the Ministry of Agriculture Fisheries and Food (MAFF). The application, including supplementary local trial data, is reviewed by the MAFF and a General Investigation Committee, a Special Investigation Committee and a Permanent Investigational Committee before authorization is granted.

Intellectual Property

Our business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

MEDICAL NUTRITION

Our Medical Nutrition Business Unit is a world leader in the research, development, manufacturing and marketing of enteral and oral nutrition products and devices tailored to the varying needs of patients and healthcare professionals. The business of our Medical Nutrition Business Unit is conducted by a number of affiliated companies in 28 countries. As of December 31, 2003, the affiliates of Medical

Nutrition (including Nutrition & Santé) employed 2,849 associates worldwide. In 2003, Medical Nutrition (including Nutrition & Santé) posted $815 million in sales, representing 3% of the Group's total sales.

Medical Nutrition is dedicated to maintaining and improving the health and well being of consumers and patients at home or in health care delivery settings (hospitals, nursing homes and home health care) by fulfilling their nutritional needs. In partnership with health care professionals, Medical Nutrition offers the highest quality medical nutrition products, devices and services ranging from standard to disease-specific products that improve health and quality of life for all age groups from pediatrics to geriatrics. This broad range of supplements, tube feedings and food provides essential nutrients for good nutrition when illness or disabilities limit a person's ability to eat a balanced diet.

In November 2002, we divested our Food & Beverage business, including Ovaltine®/Ovomaltine®, Caotina® and Lacovo®, to Associated British Foods plc for $270 million. The transaction is in furtherance of our strategy of focusing on healthcare and our core pharmaceuticals business. Our remaining Health Food & Slimming and Sports Nutrition businesses have been reorganized into a stand-alone unit called Nutrition & Santé. For reporting purposes, this unit's results have been included in the results of the Medical Nutrition Business Unit. We have announced our intention to sell Nutrition & Santé once an attractive bid is received.

In June 2003, we acquired Semper Clinical Nutrition, the second largest medical nutrition business in the Scandinavian region. Semper Clinical Nutrition is part of Semper AB, a subsidiary of Arla Foods amba, headquartered in Vidy, Denmark.

In July 2003, we secured exclusive global rights for a novel ingredient to treat patients with severe diarrhea. This product was licensed-in from AS Faktor AB, a subsidiary of Lantmannen, Sweden's largest agricultural cooperative.

In December 2003, we announced that our Medical Nutrition Business Unit had entered into an agreement with Bristol-Myers Squibb Company to acquire the global adult medical nutrition business of the Bristol-Myers subsidiary Mead Johnson & Company for $385 million in cash. This agreement is currently subject to regulatory review. Successful completion of the transaction would offer our Medical Nutrition Business Unit a strong presence in the fast-growing US retail channel for medical nutrition products, would expand its existing institutional medical nutrition business and would enhance its access to the Japanese market. The acquisition would also allow the Business Unit to further leverage its disease-specific brands consistent with its overall growth strategy.

In the US, our Business Unit's affiliate is the subject of an investigation by the US Department of Justice regarding certain marketing and pricing practices, including whether certain federal criminal statutes have been violated. See "Item 8. Financial Information 8.A Consolidated Statements and Other Financial Information 8.A.7 Legal Proceedings."

Key Marketed Products

Medical Nutrition. Our Medical Nutrition Business Unit covers the full spectrum of disease and age specific nutrition. Depending on their condition, patients need specific nutritional support to protect and

accelerate their recovery from a disease or surgery. From our comprehensive range of innovative and trusted products for Medical Nutrition, we have created five strong and recognizable global brands.

Key brands	Market/segment
Resource	Range of standard and disease-specific oral nutritional supplements
Isosource	A complete range of tube and sip feeds, providing for normal nutritional requirements
Novasource	Range of nutritional tube and sip feeds for specialty or disease specific needs
Impact	Range of standard and disease-specific oral nutritional supplements
Compat	Range of standard and specialty devices to deliver tube feeds to the gastrointestinal tract of

Key brands	Market/segment
	patients
Optifast	Range of weight management products

The Medical Nutrition Business Unit will continue to focus on a disease-specific approach while leveraging its global brands, especially in the Acute and Home Care market segments.

During September 2003, we introduced *Resource Support*, a specialized nutritional product with a unique blend of key nutrients designed to help cancer patients gain weight in the form of muscle tissue and to enhance their immune function.

During 2003, the Medical Nutrition Business Unit strengthened its partnership in the US with the Walgreens chain of drug stores to better capture the outpatient market. Under this partnership, Walgreens promotes our Medical Nutrition products through its promotional and advertising activities. Outpatient customers are able to purchase our Medical Nutrition products on-line through the Walgreens Medical Nutrition Center, located at the www.resource.walgreens.com website or through a toll-free telephone number, for delivery through Walgreens' order fulfillment system.

Nutrition & Santé. The stand-alone unit Nutrition & Santé has the following brands:

Key brands	Market/segment
Health Food & Slimming brands:	
Céréal	A broad range of natural and dietetic foods for health conscious consumers
Gerblé	A broad range of health food products, many made with wheat germ, which deliver functional benefits
Gerlinéa	An affordable slimming product range, targeting consumers who wish to remain slim while eating as normally as possible, rather than consumers with a medical weight issue
Modifast	Slimming products with added vitamins, minerals and proteins
Dietisa	A product portfolio range including medicinal plants, health foods, dietary supplements and cosmetics, sold mostly in Spain and Portugal
Pesoforma	Similar product range as *Gerlinéa* focusing on the Italian market
Lecinova	Food supplement sold in Italy
Milical	Meal substitutes range with very low calorie diet and vitamins, minerals & supplements
Sports Nutrition brands:	
Isostar	Marketed with a niche, scientific strategy to appeal primarily to professional and performance-driven athletes
Powerplay	Products targeted to bodybuilders, available only in Switzerland, Germany and Austria
Mineralplus	A recovery powder targeted at athletes who participate in endurance sports, available only in Germany and Austria

Principal Markets

In 2003, our Medical Nutrition Business Unit (including Nutrition & Santé) realized the majority of its sales in its two principal markets: the US and the EU. The following table sets out our 2003 sales by geographic region. The figures include the sales of Nutrition & Santé.

Medical Nutrition	**Sales 2003**	
	($ millions)	**(%)**
United States	256	31
Americas (except the United States)	24	3
Europe	501	62
Rest of World	34	4
Total	**815**	**100**

Our products are not subject to seasonality of demand.

Production

Our Medical Nutrition Business Unit has a manufacturing and supply infrastructure comprised of the Business Unit's own plants as well as strategic third party suppliers and other Novartis Group plants. The most significant of the dedicated Medical Nutrition plants are located in Minneapolis, Minnesota and Osthofen, Germany.

The goal of our supply chain strategy is to produce high quality products in an efficient manner. The balance of internal, external and Group sites provides flexibility and predictable sources of supply in the event of capacity constraints or other potential disruptions to ongoing supply.

Raw materials for the manufacturing process are purchased from a number of our affiliates and third party suppliers. For the most part, the products and services we procure are not proprietary and are available from a number of suppliers. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials. The manufacture of many of our products is regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

Marketing and Sales

The majority of the Medical Nutrition Business Unit's sales (excluding Nutrition & Santé) are to health institutions, such as hospitals, nursing homes, home healthcare providers and group purchasing organizations. In addition, in the US, outpatient consumers can purchase our products directly through our Walgreens partnership, by means of a toll-free telephone call or the Internet.

Competition

Novartis Medical Nutrition (excluding Nutrition & Santé) is the second largest medical nutrition company in the world in terms of sales, with strong positions in the US (second largest) and in Europe (fourth largest). Other companies selling medical nutrition products are Abbott Ross, Fresenius, Mead Johnson, Nestlé and Numico.

Research and Development

The Medical Nutrition research and development function is responsible for generating new products and therapies based on the needs of the market. Concepts are developed into prototypes using new and existing ingredients, processes, and packaging. Prototypes are scaled from bench top to pilot plant to production scale. Product attributes are validated through clinical trials under the direction of our Research and Development team, in order to determine whether the product is safe and well-tolerated. Label claims, label designs, and regulatory compliance issues are also addressed. On-going product quality is monitored and improved through specification development, testing, and corrective and preventative action.

In 2003, we invested $15 million in research and development, which amounted to 1.8% of sales.

In July 2003, we announced the globalization of the Medical Nutrition Research and Development function in order to enhance the speed, quality and time to market of our new product innovations across all regions, for both our existing mature product portfolio and our growing disease specific products. Our global headquarters has been moved to the US in order to take advantage of the clinical and scientific resources available there, and to help further strengthen our collaboration with the Pharmaceuticals Division.

Regulation

Foodstuffs are highly regulated in order to protect the public health. The following areas are generally subject to international and national food regulations: development, manufacturing, packaging, quality (food standards, ingredients), safety, labeling and advertising of foods. In the US, the Medical Nutrition Business Unit's products are covered by FDA regulations covering medical foods, dietary supplements and medical devices.

Intellectual Property

Our Medical Nutrition businesses are brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including the product's active substance and its formulation. Patents may also cover the processes for manufacturing a product, including processes for manufacturing intermediate substances used in the manufacture of the products. Patents may also cover particular uses of a product, such as its use to treat a particular disease, or its dosage regimen. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

INFANT & BABY

Our Infant & Baby Business Unit is a world leader in the research, development, manufacturing and marketing of foods and products for babies. The business of our Infant & Baby Business Unit is conducted by a number of affiliated companies in more than 50 countries. As of December 31, 2003, the affiliates of Infant & Baby employed 4,829 associates worldwide. In 2003, the affiliates of Infant & Baby achieved consolidated sales of $1.4 billion, which represented 6% of the Group's total sales.

Our Infant & Baby Business Unit is best known for its *Gerber* products which are marketed in the US and in certain other countries. The major contributor to the continued solid performance of the Business Unit is the Gerber business in the US, spurred by innovations in the Juice, *Graduates* and *Tender Harvest* lines. An outstanding success has been *Lil' Entrees*, a new line of microwavable convenience meals in trays, and the first phase of converting the core pureed products from glass to plastic. The Business Unit's results are especially strong given that baby products industry sales have been negatively impacted by the ongoing decline in the US birth rate.

Besides nutrition products, the Business Unit offers a wide variety of other products for infants and toddlers, including a baby care line (featuring nursing and feeding aids), wellness products (such as lotions and washes), and life insurance.

Key Marketed Products

Globally, our Infant & Baby Business Unit offers more than 200 food products. From *Gerber 1st FOODS* to *Graduates*, the company's product line covers each phase of child development with diverse flavors and textures. *Gerber* baby and toddler foods include Cereals, *1st FOODS*, *2nd FOODS*, *3rd FOODS*, *Tender Harvest* (organic food), *Finger Foods*, Fruit and Vegetable Juices and *Gerber Graduates* Toddler Food. *Gerber*'s nutrition business began in 1928, in Fremont, Michigan and marked its 75th anniversary in 2003. *Gerber* began its baby care line in 1960 and now markets more than 350 *Gerber* and NUK® branded products. Bottles, teethers, pacifiers, breastfeeding accessories and spill-proof cups are just a few of the products now being distributed to babies and parents around the world.

Continuing its commitment to baby care, *Gerber* introduced a complete line of skincare and healthcare products in 1999, all designed to help parents raise happy, healthy babies. The skincare products include a full line of washes, lotions and tear-free shampoos with the *Gerber SkinNutrients* unique blend of seven vitamins and natural ingredients. The healthcare line includes Pediatric Electrolyte Solution, Tooth & Gum Cleanser, Diaper Rash Ointment, Gas Relief Drops and Vitamin Drops.

Since 1967, our affiliate Gerber Life Insurance Company, has been marketing life insurance protection directly to the consumer. Currently, Gerber Life's *Grow Up* policy is the leading juvenile whole life insurance product distributed in the US and Canada.

In addition, we have licensed the *Gerber* trademark to an unaffiliated company, Gerber Childrenswear, Inc., which sells bibs, apparel, shoes and similar products carrying the trademark. Gerber Childrenswear, Inc. pays royalties to our affiliate, Gerber Products Company, for the use of the trademark.

The major brands and product groups in Infant & Baby are:

Key Brands	Product groups	Main markets
Gerber, Graduates, Lil' Entrees, Tender Harvest, Yukery, 1st FOODS, 2nd FOODS, 3rd FOODS	Baby food	US, Latin America, Europe, Asia
Argos, Fiona, Gerber, Lillo by Gerber, Ninet, NUK®	Baby Care	US, Canada, Asia, Latin America
Argos, Capent, Gerber, Ninet	Baby Wellness	US, Latin America
Gerber Life	Insurance	US

Recently Launched Products

In the US, *Gerber* continued to build on its position as a leader in infant feeding and care with a number of innovations in 2003. In response to consumers' need for convenience, *Gerber* launched single-serve plastic packages, ideal for out-of-home feeding. *Gerber* now offers all juices and top selling fruit purees in single-serve plastic containers. The number of different products packaged in plastic will continue to expand in 2004. In addition, in 2003, the *Gerber Wellness* product line was launched in Canada, and in Korea through a direct marketing company. In Latin America, jarred nutrition products fortified with vitamins and minerals were introduced along with dinners containing Omega 3 and Omega 6 fatty acids. Also, new cereals featuring milk and fruit were brought to market in Brazil and Mexico.

Within the *Gerber Care/Wellness* business, a number of innovative new products were launched at the end of 2002. The new spill-proof *Insulated Cool Cup* helps beverages to retain their desired temperature longer. Also, two new cups were launched that help during key development transitions. The first helps babies transition from the bottle to spill-proof cups. The second will later help them transition from the spill-proof cups to adult cups. For breast feeding mothers, a line of breast therapy items was introduced in December 2002, which includes soothers, warm-cool packs and moistening sticks.

Principal Markets

In 2003, the Infant & Baby Business Unit realized the majority of its sales in its two principal markets: the US and Latin America. The following table sets out our 2003 sales by geographic region.

Infant & Baby	Sales 2003

Infant & Baby	Sales 2003	
	($ millions)	(%)
North America	1,106	81
Latin America	195	15
Europe/Middle East/Africa	42	3
Asia	18	1
Total	**1,361**	**100**

Infant & Baby retail sales are not significantly affected by seasonal variations.

Production

Key factors in Infant & Baby's successful supply chain strategy include a high efficiency, low cost structure and the mitigation of risks through multiple production sources. Regional sites serve specific markets but are also capable of providing support as needed to other regions in the event of supply disruption. Gerber operates production facilities in North America, South America and Eastern Europe for nutrition and care products. Major production sites are in Fremont, Michigan; Fort Smith, Arkansas; Reedsburg, Wisconsin; Querétaro, Mexico and Rzeszow, Poland.

The manufacture of most of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances. The Baby Care and Wellness franchises tend to utilize suppliers from a wider geographic area.

We often "single-source" supplies, but we have a policy of having at least a second approved and validated supplier registered for most key materials so that substitution is possible. Where practical and beneficial, we have long-term contracts in place on key production inputs. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials.

Raw materials for the manufacturing process are purchased from a number of third party suppliers. For the most part, raw materials for our nutrition products are sourced from within the country of use. Our growers and suppliers are well versed in our strict agricultural requirements and generally have long term relationships with us. We are subject to adverse weather and growing conditions, but mitigate this as much as possible with alternative geographic sourcing areas.

Marketing and Sales

The mission for the Infant and Baby Business Unit is to leverage our brand leadership of trust in helping parents nurture happy, healthy babies into the leading infant and baby brand around the world. In 2003, *Gerber* continued converting glass jars to plastic containers for its nutrition products. This major innovation is a result of consumer data which clearly indicates the preference for plastic as a better fit for today's active parents and families. Strong brands, product development based on sound nutrition principles, and in-house marketing and sales organizations are some of our key strengths. *Gerber* products are distributed through food, drug and mass merchandiser retail outlets.

Competition

Other companies selling infant and baby foods are Del Monte and Beechnut in the US, Nestlé and Heinz in Latin America, Nutricia in Eastern Europe and other regional businesses elsewhere. Other companies selling baby care and wellness products are Johnson & Johnson, Playtex and Avent in the US. There are other companies selling these products located in Latin America and Asia. Another company selling juvenile life insurance policies in the US is Globe Life and Accident Insurance Co., an affiliate of Torchmark Corporation.

Research and Development

The Infant & Baby Business Unit has a Research and Development department which uses a multi-faceted approach to deliver consumer innovation by developing new processes, products and packaging for the nutrition, Baby Care and Wellness franchises. Internally developed new processes include *NatureLock*, a patented cooking process for jarred fruits and vegetables. New products include *Lil' Entrees*, our nutritious, portable meals for toddlers. Packaging innovations include aseptic plastic packaging, which provide additional convenience for consumers.

In addition, *Gerber* Research and Development oversees research regarding the needs of infants and their development. For example, *Gerber*'s Feeding Infants and Toddlers Study (FITS) analyzed the feeding habits and nutrient intake of a cross-sectional, random sample of more than 3,000 US children ranging from 4 to 24 months of age. The results of this Study were published in January 2004, in a special supplement of the Journal of the American Dietetic Association. Gerber commissioned the survey in response to the growing obesity epidemic in the US, in order to better understand eating habits early in life when they are being formed. FITS is the largest scientific study of its kind ever conducted and fills a critical gap in knowledge. The findings will inform and provide insights to help health professionals develop more effective educational messages. Effective educational efforts that help parents and caregivers teach healthy eating habits early in life can help prevent obesity and chronic diseases in our next generation.

In 2003, the Infant & Baby Business Unit invested approximately $28 million in research and development, representing 2.1% of Infant & Baby sales.

Regulation

Foodstuffs are highly regulated in order to protect the public health. The following areas are generally subject to international and national food regulations: development, manufacturing, packaging, quality (food standards, ingredients), safety, labeling and advertising of foods. Infant foods are regulated by various governmental agencies on a country-by-country basis. There is no global harmony of requirements and regulations. Many countries require food products to be registered in order to document the safety and nutrition of imported food products. *Gerber* food products are specifically designed to meet the nutritional needs of infants and toddlers in the regions where they are sold and to meet or exceed requirements of the local regulatory agencies. These nutritional need standards are determined based on independent, peer-reviewed research, or by studies sanctioned by authorities such as the US Department of Health and Human Services.

In the US, agencies such as the FDA, the USDA, the EPA and the Consumer Product Safety Commission are responsible for providing safety specifications and otherwise regulating our products and ingredients. The FDA and USDA have issued regulations and standards regarding the use of specific ingredients in certain types of food products, including which ingredients are allowed, and at what level, as well as ingredients that may be required in certain products. In addition, these agencies regulate food product labeling and the claims which can be made regarding food products. Globally, safety of ingredients and products are guided by recommendations from the Codex Alimentarius, a section of the WHO.

Intellectual Property

Our Infant & Baby Business Unit is brand-oriented, with the *Gerber* baby trademark among the most recognized in the world. Therefore, we consider this trademark, as well as others within Infant & Baby, to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Patents may cover products, product formulations, designs, processes, intermediate products or product uses. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

CIBA VISION

CIBA Vision is a world leader in the research, development, manufacturing and marketing of eye care products, specifically soft contact lenses, lens care products, and ophthalmic products. The business of our CIBA Vision Business Unit is conducted by a number of affiliated companies in more than 70 countries. As of December 31, 2003, the affiliates of CIBA Vision employed 5,717 associates worldwide. In 2003, the affiliates of CIBA Vision achieved consolidated sales of $1.3 billion, representing 5% of the Group's total sales.

In August 2003, CIBA Vision announced its intent to pursue strategic alternatives for its ophthalmic surgical business, including the potential sale of that unit. Agreements have since been reached with certain third parties to sell them certain assets of the surgical business.

On January 1, 2001, CIBA Vision's Ophthalmic Pharmaceuticals business became part of our Pharmaceuticals Division in a reorganization.

Recently Launched Products

Focus NIGHT & DAY continuous wear lenses for up to 30 nights and days, received FDA approval for therapeutic use as a bandage lens in May 2003.

We launched a number of new product additions around the world to our leading brands of cosmetic and color contact lenses. Those products include the June 2003 US launch of *FreshLook Dimensions*, the new generation of enhancing color contact lenses designed specifically for light eyes, as well as two new *FreshLook ColorBlends* colors.

SOLO-care AQUA, the latest generation of no-rub multipurpose lens care solution, was introduced in Europe in 2003. Every bottle of *SOLO-care AQUA* is sold with a *MicroBlock* anti-bacterial lens case that kills bacteria and other microorganisms on contact and also resists the growth of new bacteria on the lens case.

In August 2003, *AOSEPT Clear Care* (sold as *AOSEPT Plus* in Europe) and *SOLO-care PLUS* lens care solutions received FDA approval for a specific indication for use with silicone hydrogel lenses. *Clear Care* is the first peroxide-based solution to be approved with this indication in the US.

AOSEPT Clear Care was approved by Health Canada for 7-day storage of contact lenses in July 2003. Previously, lenses were only approved for storage in *Clear Care* for 24 hours after disinfection. *Clear Care* had previously been approved for 7-day storage by the FDA in December 2002.

AOSEPT Clear Care was approved by the FDA for use with gas permeable (GP) lenses in April 2003.

AQuify, an innovative lens drop that replicates the behavior of natural tears to provide long-lasting comfort for contact lens wearers, was launched in North America in September 2003. It had previously been launched in Europe in October 2002.

Key Marketed Products

The table below sets out the key marketed products in each of CIBA Vision's two principal product segments:

Main Products	Description
Contact Lenses	
Focus DAILIES	One-day disposable
Focus DAILIES Progressives	One-day disposable to correct presbyopia
Focus DAILIES Toric	One-day disposable to correct astigmatism
Focus NIGHT&DAY	Extended wear for up to 30 days and nights continuous wear

Main Products	Description
Focus Progressives	Corrects presbyopia
Focus Toric	Corrects astigmatism
Focus Monthly	Replaced monthly
Focus 1-2 Week	Replaced every one to two weeks
Focus 1-2 Week *SoftColors*	Replaced every one to two weeks; enhances the color of light eyes
DuraSoft 3 Colors	Conventional cosmetic tinted lenses
FreshLook Colorblends	Opaque lenses that blend three colors on one lens creating a more natural looking cosmetic tinted lens for dark or light eyes
FreshLook Colors	Disposable lenses for eye color change
FreshLook Dimensions	Lenses which enhance the color and appearance of light eyes
FreshLook Radiance	Lenses for people with light or dark eyes that provide illuminating effects which vary based on a person's natural eye color, skin tone and hair color
WildEyes	Novelty lenses
Illusions Opaque	Conventional lenses for changing the color of dark eyes
Cibasoft	Conventional lenses with handling tint
Cibasoft Softcolors	Conventional lenses for enhancing the color of light eyes

Lens Care Products	
AOSept Clear Care/AOSept PLUS	An enhanced formulation of our leading *AOSept* hydrogen peroxide disinfectant; the first one-bottle, no-rub lens care solution with no added preservatives in the US
SOLO-care AQUA	Latest generation one-bottle lens care solution formulated with ProVitamin B5 to promote moisture. Package includes *MicroBlock* anti-bacterial contact lens case
SOLO-care Plus	An enhanced formulation of our *SOLO-care* one-bottle lens disinfection system; offers a one-bottle, no-rub, no-rinse cleaning and disinfection system
BLUE Sept/BLUE Vision	One-step hydrogen peroxide lens disinfection system; features blue color indicator
QuickCARE/InstaCARE	Five-minute disinfectant system
Pure Eyes	Two-bottle hydrogen peroxide system
AQuify	Lens drop that replicates natural tears
Focus Lens Drops	Lens drop for lubricating contact lenses

Principal Markets

Our principal markets, in terms of 2003 sales, were North America (US and Canada), Europe and Japan. Sales are not subject to seasonality. The following table sets forth 2003 sales for CIBA Vision by region:

CIBA Vision	Sales 2003	
	($ millions)	(%)
United States	461	35
Americas (except the United States)	75	6
Europe	497	38
Japan	192	15
Rest of the World	83	6
Total	**1,308**	**100**

Production

CIBA Vision has major production facilities in Pulau Batam, Indonesia; Duluth, Georgia; Des Plaines, Illinois; Grosswallstadt, Germany; Cidra, Puerto Rico and Toronto, Canada. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our third party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities, which in turn could lead to product shortages. While we have not experienced material supply interruptions in the past, there can be no assurance that supply will not be interrupted in the future as a result of unforeseen circumstances.

We purchase basic chemical commodity raw materials for our lens products from industrial vendors. These raw materials are then reformulated into the monomers and polymers required to produce contact

lenses. Polymer chemistry is one of the innovative elements in our contact lens products. The technology to produce the polymers and monomers is stable and well-defined.

We enter into long-term supply contracts (generally over one to two years) with industrial raw material vendors, which limits volatility. In addition, most raw materials are basic chemical commodities and multiple suppliers are available. Certain lens products use proprietary chemicals that are produced specifically for us and sold exclusively to us. We also use a custom- designed process to synthesize macromonomers, a key raw material needed in contact lens production, which are produced by a contract vendor for a negotiated price.

Marketing and Sales

Contact lenses are considered medical devices by regulatory authorities and, therefore, are available only with a prescription from an eye-care professional in most countries. CIBA Vision lenses can be purchased from independent eye care professionals and optical chains. CIBA Vision's lens care products can be found in major drug, food and mass merchandising retail chains in the United States, Europe, Japan and elsewhere. In addition, mail order and Internet sales are becoming increasingly important channels in major markets worldwide.

Eye care professionals are CIBA Vision's primary marketing focus. In addition, we have direct-to-consumer initiatives including free trials and coupons.

Competition

Contact Lenses

Growth in the contact lenses market is driven primarily by an increased demand for lenses and an increasingly varied product mix. As consumers move toward frequent replacement lenses, including one-day disposable lenses, demand for lenses is increasing. Additionally, the customer base is expanding with the development of new contact lens options, such as daily disposable, 30-night continuous wear, toric lenses for astigmatic patients and lenses to correct presbyopia, a condition prevalent among the "Baby Boom" generation. We are well-positioned in the contact lens market as the second-leading player on the basis of market share. CIBA Vision now has the broadest product portfolio of any

competitor in the industry. Our colored lens technology also creates a strong combination with our other products that should prove attractive to women and teenagers, in particular. Other companies selling contact lenses are Bausch & Lomb and Johnson & Johnson.

Lens Care

We expect to increase our presence in the one-bottle market segment with our *SOLO-care* brand lens care products and to maintain a leading position in the peroxide category with *AOSept Clear Care* lens care, which is required by wearers of frequent replacement and conventional contact lenses. The peroxide category is a mature market segment and the products will continue to face competitive pressure due to the increasing preference for daily disposable and continuous wear lenses, which require little or no lens care. CIBA Vision is a global leader in the peroxide lens care category with *AOSept* and *AOSEPT Clear Care.* Other companies selling lens care products are Alcon, Advanced Medical Optics and Bausch & Lomb.

Ophthalmic Surgical

The Ophthalmic Surgical market includes intraocular lenses and phaco equipment for cataracts, laser vision correction, surgical devices, surgical adjuncts and vitreo-retinal products. We have announced our intent to pursue strategic alternatives for our ophthalmic surgical business, including the potential sale of that unit. Agreements have since been reached with certain third parties to sell them certain assets of the surgical business. Other companies selling ophthalmic surgical products are Alcon, Advanced Medical Optics, Bausch & Lomb, Pharmacia and Staar Surgical.

Research and Development

The research results of other Novartis affiliates provide CIBA Vision with new chemical compounds for future products and access to developments in biotechnology. These resources are complemented by CIBA Vision's internal research and development capabilities, licensing agreements and joint research and development partnerships with third parties (companies, individuals and universities).

CIBA Vision is continually working to expand its product portfolio through our own dedicated research and development resources as well as through the acquisition of new and innovative technologies. Product development involves the creation of entirely new product offerings as well as line extensions of current products.

For contact lenses our key focus is in three areas: daily disposable contact lenses, silicon hydrogel lenses for continuous or daily wear and an ongoing expansion of our cosmetic and color lenses. In lens care, our development efforts focus on making our lens care solutions more convenient to use, while ensuring that the solutions provide the safety and cleaning power needed to help maintain healthy eyes.

We invested $74 million in research and development of eye care products in 2003, representing 6% of the Business Unit's sales.

Regulation

Contact lenses, surgical devices and lens care products are regulated as medical devices in the US, the EU and Japan. These jurisdictions each have risk-based classification systems that determine the type of information which must be provided to the local regulators in order to obtain the right to market a product.

In the US, all devices must receive pre-market approval by the FDA. There are two review procedures to gain this pre-market approval: a pre-market application (PMA) and a 510(k) submission. Under a PMA, the manufacturer must submit to the FDA supporting evidence sufficient to prove the safety and effectiveness of the device. The FDA has 180 days to review a PMA. Certain products, however, may qualify for a submission authorized by Section 510(k) of the US Food, Drug and Cosmetic Act. Under this procedure, the manufacturer gives the FDA a pre-market notification that it intends to commence marketing the product, and that it has established that the product is substantially equivalent to another product already on the market. The FDA has 90 days to review a 510(k) submission. In the US, no 30-day extended-wear lenses had previously existed on the market, so we were required to proceed under the PMA procedure. Lens care products generally qualify for 510(k) submission. Ophthalmic surgical devices fall into both PMA or 510(k) categories depending on the availability of data from previously approved devices.

In the EU, the "CE" mark is required for all medical devices sold. CIBA Vision affiliates hold a CE mark for the classes of vision care medical devices that they sell. The CE mark allows CIBA Vision to market products upon signing a declaration of conformity with the EU's

Medical Device Directive requirements, which CIBA Vision affiliates do for each product sold. In addition, medical device sales in the EU require auditing by a certified third party (a "Notified Body") to ensure that the manufacturer's quality systems are in compliance with the requirements of the ISO 9000 standards. CIBA Vision has two Notified Bodies which routinely audit the company's quality systems.

In Japan, contact lenses are categorized as medical devices and are subject to an approval process similar to that in the US. Although there has been an improvement in the willingness to accept foreign data and a movement toward harmonization of requirements, in order to enter the Japanese market, local clinical trials often are required and local protocols must then be observed. Lens care products for soft lenses take several years to gain approval due to the extensive amount of data and clinical testing required. Surgical devices are also categorized by risk level and a lengthy testing, review and approval process is required. Saline solutions for hard lenses are unregulated.

Intellectual Property

Our CIBA Vision business is brand-oriented and, therefore, we consider our trademarks to be of utmost value. Trademarks protect most of our brands in the majority of the markets where these brands are sold, and we vigorously protect these trademarks from infringement. Our most important trademarks are used in a number of countries. Local variations of these international trademarks are employed where legal or linguistic considerations require the use of an alternative.

Wherever possible our products are protected by patents. Among other things, patents may cover the products themselves, including contact lenses, polymers and formulations. Patents may also cover the processes and devices for manufacturing a product. Patents may also cover particular uses of a product. It is our policy to seek the broadest possible protection for significant product developments in all major markets.

We are involved in extensive patent litigation against Bausch & Lomb (B&L) and Johnson & Johnson (J&J) regarding silicone hydrogel long-term wear contact lenses. In February 2003, the US Court of Appeals for the Federal Circuit upheld the US District Court's prior ruling that B&L's PureVision contact lenses infringe our "Harvey" patent. As a result, B&L cannot resume manufacture or sale of its PureVision contact lenses within the US at least until 2005, when the Harvey patent expires.

We have also brought suit against B&L in the US for infringement of our "Nicolson" patents. If we are successful in this action, PureVision lenses will remain off the US market until at least 2014.

We have also brought a suit against B&L in Ireland, Germany and Australia. The Australian case was tried in October, but no ruling has yet been entered. A German court ruled that PureVision infringed the Nicolson patent, and sales of PureVision were halted in Germany early in 2003. However, the European Patent Office (EPO) issued an invalidity ruling in October 2003, which stayed the German injunction pending appeal of the EPO ruling.

B&L has brought a countersuit against us for alleged infringement by *NIGHT & DAY* of US patents held by them.

J&J filed a suit against us in September 2003, in both the US and Australia, seeking a declaration that their planned launch of a silicone hydrogel lens product does not infringe the Nicolson patents or that the patents are invalid. J&J also claimed our silicone hydrogel product, *Focus NIGHT & DAY*, infringes a J&J packaging patent.

4.C Organizational Structure

The Novartis Group is a multinational group of companies specializing in research, development, manufacture, marketing and sales of innovative healthcare products. Novartis AG, our Swiss holding company, owns, directly or indirectly, 100% of all significant operating companies. For a list of our subsidiaries, see note 31 to the consolidated financial statements.

The Group is divided operationally into two Divisions: Pharmaceuticals and Consumer Health. Our Pharmaceuticals Division is organized into five Business Units: Primary Care, Oncology, Transplantation, Ophthalmics and Mature Products. The six Business Units of the Consumer Health Division are: Sandoz generics, OTC self-medication, Animal Health, Medical Nutrition, Infant & Baby and CIBA Vision. The Business Units coordinate the worldwide research, distribution, marketing and sales of the products assigned to each. Because the Business Units of the Pharmaceuticals Division have common long-term economic perspectives, common customers, common research, development, production and distribution practices, and a common regulatory environment, their financial data is not required to be separately disclosed.

4.D Property, Plants and Equipment

Our principal executive offices are located in Basel, Switzerland. Our Business Units operate through a number of affiliates having offices, research facilities and production sites throughout the world.

It is our policy to own our facilities. A few sites (mainly in the US) are leased under long-term leases. Some of our principal facilities are subject to mortgages and other security interests granted to secure indebtedness to certain financial institutions. As of December 31, 2003, the total amount of indebtedness secured by these facilities was not material to the Group. We believe that our production plants and research facilities are well maintained and generally adequate to meet our needs for the foreseeable future.

The following table sets forth our major production and research facilities.

Location/Division or Business Unit	Size of Site	Major Activity
Major Production facilities:		
Pharmaceuticals		
Taboão da Serra, Brazil	539,000 square meters	Capsules, tablets, syrups, suppositories, suspensions, creams, drop solutions, powders
Ringaskiddy, Ireland	532,000 square meters	Drug substances, intermediates
Basel, Switzerland Klybeck	254,000 square meters	Drug substances, intermediates
Basel, Switzerland St. Johann	219,000 square meters	Drug substances, intermediates, biotechnology
Basel, Switzerland Schweizerhalle	237,000 square meters	Drug substances, intermediates
Stein, Switzerland	460,000 square meters	Steriles, tablets, capsules, transdermals
Grimsby, UK	929,000 square meters	Drug substances, intermediates
Suffern, NY	656,000 square meters	Tablets, capsules, transdermals
Horsham, UK	112,000 square meters	Tablets, capsules
Wehr, Germany	165,000 square meters	Tablets, creams, ointments
Torre, Italy	210,000 square meters	Tablets, biotechnology
Barbera, Spain	51,000 square meters	Tablets, capsules
Huningue, France	250,000 square meters (includes Animal Health facilities)	Suppositories, liquids, solutions, suspensions, biotechnology
Sasayama, Japan	104,000 square meters	Capsules, tablets, syrups, suppositories, creams, drop solutions, powders

Location/Division or Business Unit	Size of Site	Major Activity
	74	
Sandoz		
Kundl and Schaftenau, Austria	320,000 square meters (production and R&D facilities)	Biotech products, intermediates, active drug substances, final steps (finished pharmaceuticals)
Menges, Slovenia	131,000 square meters (production and R&D facilities)	Biotech products and active drug substances
Ljubljana, Slovenia	83,000 square meters (production and R&D facilities)	Broad range of finished dosage forms
Broomfield, CO	60,000 square meters	Broad range of finished dosage forms
Stryków, Poland	20,000 square meters	Broad range of finished dosage forms
Kalwe, India	10,000 square meters	Broad range of finished dosage forms
OTC		
Lincoln, NE	44,870 square meters	Liquids, creams and tablets
Nyon, Switzerland	14,700 square meters (production and R&D facilities)	Liquids and creams
Humacao, Puerto Rico	8,000 square meters	Sugar coated tablets, small chocolate tablets, packaging of softgels
Animal Health		
WUSI-Farm, China	42,000 square meters	Insecticides, antibacterials, acaricides, powders
Dundee, UK	34,000 square meters	Packaging, formulation liquids, solids, creams, sterile filling
Larchwood, IA	29,700 square meters (production and R&D facilities)	Veterinary immunologicals
Braintree, UK	10,000 square meters	Veterinary immunologicals
Huningue, France	6,000 square meters	Formulation and packaging of tablets, creams, ointments, suspensions and liquids
	75	
Medical Nutrition		
Minneapolis, MN	33,500 square meters (production and	Medical nutrition products

	R&D facilities)	
Osthofen, Germany	17,000 square meters (production and R&D facilities)	Medical nutrition and Nutrition & Santé products
Infant & Baby		
Fremont, MI	107,000 square meters (production and R&D facilities)	*Gerber* jarred baby food, fruit and vegetable juices, dry boxed cereal
Fort Smith, AR	80,451 square meters	*Gerber* jarred baby food, dry cereal
Querétaro, Mexico	205,000 square meters	*Gerber* jarred baby food, fruit and vegetable juices, dry canned and bagged cereal
Reedsburg, WI	30,000 square meters	Baby Care products; spill-proof cups, bottles, nipples, breast pads, pacifiers, overcaps
Rzeszow, Poland	45,000 square meters	*Gerber* baby food, fruit juice
CIBA Vision		
Pulau Batam, Indonesia	19,000 square meters	Contact lenses
Duluth, GA	28,000 square meters	Contact lenses
Des Plaines, IL	27,400 square meters	*Freshlook* product line
Grosswallstadt, Germany	19,000 square meters	Contact lenses
Cidra, Puerto Rico	6,100 square meters	Contact lenses
Toronto, Canada	14,500 square meters	Lens care products
Major Research and Development facilities:		
Pharmaceuticals		
East Hanover, NJ	177,398 square meters	General pharmaceutical products
Cambridge, MA	22,500 square meters	General pharmaceutical products (as of March 1, 2003)
Basel, Switzerland Klybeck	140,000 square meters	General pharmaceutical products

Basel, Switzerland St. Johann	150,000 square meters	General pharmaceutical products
Vienna, Austria	39,000 square meters	Dermatology

Tsukuba, Japan	20,600 square meters	General pharmaceutical products
Horsham and London, UK	37,700 square meters	Respiratory and nervous system diseases
Sandoz		
Kundl and Schaftenau, Austria	320,000 square meters total area (production and R&D facilities)	Biotech processes, innovations in antibiotic technologies
Menges, Slovenia	131,000 square meters (production and R&D facilities)	Biotech products and active drug substances
Ljubljana, Slovenia	83,000 square meters (production and R&D facilities)	Broad range of finished dosage forms
Kolshet, India	5,000 square meters	Generic pharmaceuticals
Dayton, NJ	29,000 square meters	Generic pharmaceuticals
OTC		
Lincoln, NE	44,870 square meters	Liquids, creams and tablets
Nyon, Switzerland	14,700 square meters (production and R&D facilities)	Over the counter medicine products
Animal Health		
St. Aubin, Switzerland	26,000 square meters	Parasiticides
Larchwood, IA	29,700 square meters (production and R&D facilities)	Veterinary immunologicals development
Yarandoo, Australia	3,250 square meters	Animal Health products
Medical Nutrition		
Minneapolis, MN	33,500 square meters (production and R&D facilities)	Medical nutrition products
Osthofen, Germany	17,000 square meters (production and R&D facilities)	Medical nutrition and Nutrition & Santé products

Infant & Baby		
Fremont, MI	107,000 square meters (production and R&D facilities)	Baby food products
CIBA Vision		
Duluth, GA	9,000 square meters	Vision-related medical devices

In 2003, we continued our creation and expansion of the Novartis Institutes for BioMedical Research, Inc. (NIBRI) facility in Cambridge, Massachusetts. As of December 31, 2003, this new research facility provided 22,500 square meters of laboratory and office space for more than 350 scientists and technology experts. When completed in 2004, we expect to provide a total of 67,500 square meters of laboratory and office space for over 800 scientists and technology experts. To date, we have invested approximately $238 million in this new facility.

On December 11, 2003, our Sandoz generics Business Unit announced that it had acquired the production plant of Amifarma S.L. in Palafolls, Spain. The plant manufactures sterile, injectable bulk antibiotics.

Environmental Matters

We integrate core values of environmental protection into our business strategy to add value to the business, manage risk and enhance our reputation.

We are subject to laws and regulations concerning the environment, safety matters, regulation of chemicals and product safety in the countries where we manufacture and sell our products or otherwise operate our business. These requirements include regulation of the handling, manufacture, transportation, use and disposal of materials, including the discharge of pollutants into the environment. In the normal course of our business, we are exposed to risks relating to possible releases of hazardous substances into the environment which could cause environmental or property damage or personal injuries, and which could require remediation of contaminated soil and groundwater. Under certain laws, we may be required to remediate contamination at certain of our properties regardless of whether the contamination was caused by us, or by previous occupants of the property.

We believe that we are in substantial compliance with environmental, health and safety requirements applicable to us. We are committed to providing safe and environmentally sound workplaces that will not adversely affect the health or environment of employees or the communities in which we operate. We believe that we have obtained all material environmental permits required for the operation of our facilities as well as all material authorizations required for the products produced by us. We believe that we are not currently subject to liabilities for non-compliance with applicable environmental, health and safety laws that would materially and adversely affect our business, financial condition or results of operations. However, there is a risk that legislation enacted in the future could create liabilities for past activities undertaken in compliance with then-current laws and regulations or that there is environmental or other damage of which we are not aware.

In recent years, the operations of all companies have become subject to increasingly stringent legislation and regulation related to occupational safety and health, product registration and environmental protection. Such legislation and regulations are complex and constantly changing, and there can be no assurance that future changes in laws or regulations would not require us to install additional controls for certain of our emission sources, to undertake changes in our manufacturing

processes or to remediate soil or groundwater contamination at facilities where such clean-up is not currently required. Some of our facilities are over 50 years old, and there may be soil and groundwater contamination at such facilities. However, based on current information, we do not believe that expenditures related to such possible contamination, beyond those already accrued, will be significant.

Our expenditures related to capital investments for environmental, health and safety compliance measures were approximately $88 million in 2003 ($12 million for environment), $39 million in 2002 ($7 million for environment), and $32 million in 2001 ($7 million for environment). While we cannot predict with certainty our aggregate capital environmental investments in 2004, based on current information and existing assets, we estimate that such aggregate expenditures will be comparable to the 2003 figure.

It is difficult to estimate the future costs of environmental protection and remediation because of many uncertainties, including uncertainties about the state of laws, regulations and information related to individual locations and sites. However, given our experience to date regarding environmental matters and the facts currently known, we believe that compliance with existing and known national and local environmental laws and regulations will not have a material effect on our financial condition, but could be material to our results of operations in a given period.

Item 5. Operating and Financial Review and Prospects

5.A Operating Results

The following operating and financial review and prospects should be read in conjunction with our consolidated financial statements included in this Form 20-F. The consolidated financial statements and the financial information discussed below have been prepared in accordance with IFRS. Please see "Item 18. Financial Statements note 32" for a discussion of the significant differences between IFRS and US GAAP.

Overview

We are a world leader both in sales and in innovation in our continuing core businesses: pharmaceuticals and consumer health, which includes generics, OTC self-medication, animal health, medical nutrition, infant and baby foods and products, and eyecare products, with global sales of $24.9 billion in 2003. We aim to hold a leadership position in all of our businesses.

Novartis AG was formed in 1996 out of a merger of two global participants in the pharmaceutical and agrochemical industries, Sandoz AG and CIBA-Geigy AG. Accounting for the merger under IFRS was based on a uniting of interests and therefore did not result in any goodwill nor in any goodwill amortization. Under US GAAP, the merger is accounted for as a purchase of CIBA-Geigy AG by Sandoz AG. For a discussion of the significant differences between IFRS and US GAAP purchase accounting, see "Item 18. Financial Statements note 32." In November 2000, we spun off our Crop Protection and Seeds businesses and merged them with AstraZeneca's Zeneca Agrochemicals to create Syngenta AG, a public company.

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 fueled by broad and rapid access to information. At the same time, the healthcare industry is under increasing pressure to reduce prices as payers in the public and private sectors seek to curb rising healthcare costs.

Our revenues are directly related to our 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 we, like our competitors, search 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 collaboration 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 our future development.

In addition, competitive conditions have intensified as a result of regulation, price reductions, reference prices, higher patient co-payments and increased pressure on physicians to limit prescribing. Pressure on our Pharmaceutical division 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 product distribution anomalies, mainly in the EU, pose additional challenges.

Exchange rate exposure also affects our results as we have both sales and costs in many currencies other than the US dollar. This gives rise to both transaction exposure in subsidiary financial statements due to foreign currency denominated transactions and to translation exposure from converting foreign and domestic subsidiary results and balance sheets into our US dollar consolidated financial statements. Our results have not been significantly affected by inflation. See "Exchange Rate Exposure and Risk Management" below.

Critical Accounting Policies

Our principal accounting policies are set out in note 1 of our consolidated financial statements and conform with IFRS. 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, including identifiable intangibles and goodwill, are regularly reviewed for impairment whenever events or changes in circumstance indicate that the balance sheet carrying amount of the asset may not be recoverable. In order to assess if there is any impairment, estimates are made of the future cash flows expected to result from the use of the asset and

its eventual disposition. If the balance sheet carrying amount of the asset is more than the greater of its value in use to us or its anticipated 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.

We have extensive investments in marketable securities and have significant derivative financial instrument positions which are mainly, but not exclusively, held for hedging underlying positions. Under current IFRS 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. Our 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 recognize an impairment by transferring these losses out of the equity component into our income statement.

We have investments in associated companies (defined generally as 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 such companies including Roche Holding AG and Chiron Corporation may require adjustments in the following year as more financial and other information becomes publicly available.

We sponsor pension and other retirement plans in various forms covering employees who meet eligibility requirements. These plans cover the majority of our 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 our management within certain guidelines. In addition, our 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.

We have provisions for environmental remediation costs. The material components of the environmental provisions consist of costs to fully clean and refurbish contaminated sites and to treat and contain contamination at sites where the environmental exposure is less severe. 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 us at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties.

We believe that our 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. Our management believes that such additional amounts, if any, would not be material to our financial condition but could be material to our results of operations in a given period.

A number of our subsidiaries are the subject of litigation arising out of the normal conduct of their business. As a result, claims could be made against them which might not be covered by existing provisions or by insurance. Our management believes that the outcomes of such actions, if any, would not be material to our financial condition but could be material to our results for operations in a given period.

In 2003, according to IFRS we continued to amortize goodwill even though for US GAAP purposes we ceased to amortize goodwill in accordance with Statement of Financial Accounting Standards ("SFAS") No. 142 *Goodwill and Other Intangible Assets*. SFAS 142 requires us to perform an annual review of our US GAAP goodwill for impairment. Based on this annual review, we recognize impairment losses if necessary. In particular, just under US GAAP, we have goodwill relating to

Gerber Products with a carrying amount of $2.9 billion at December 31, 2003. As required, we performed our annual impairment test of goodwill in 2003, which did not require us to record an impairment charge. The process of evaluating goodwill involves making adjustments and estimates relating to the projection and discounting of future cash flows. This evaluation is sensitive to changes in the discount rate. An increase to discount rates is likely to result in a significant impairment charge under US GAAP.

The International Accounting Standards Board is entering a period of critically examining current International Financial Reporting 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 Sales 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

The following table sets forth selected income statement data for each of the periods indicated.

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Sales to third parties			
Pharmaceuticals	**16,020**	**13,528**	**11,965**
Sandoz	2,906	1,817	1,444
OTC	1,772	1,521	1,507
Animal Health	682	623	570
Medical Nutrition	815	711	661
Infant & Baby	1,361	1,333	1,319
CIBA Vision	1,308	1,135	1,059
Consumer Health ongoing	**8,844**	**7,140**	**6,560**
Divested Health & Functional Food activities		209	237
Consumer Health	**8,844**	**7,349**	**6,797**
Group sales	**24,864**	**20,877**	**18,762**
Sales	**24,864**	**20,877**	**18,762**
Cost of Goods Sold[1]	(5,894)	(4,994)	(4,744)
Marketing & Sales[1]	(7,854)	(6,737)	(6,060)
Research & Development[1]	(3,756)	(2,843)	(2,528)
General & Administration[1]	(1,471)	(1,211)	(1,105)
Group Operating income	**5,889**	**5,092**	**4,325**
Operating income by Division/Business Unit			
Pharmaceuticals	**4,423**	**3,891**	**3,377**
Sandoz	473	265	166
OTC	309	240	268

	2003	2002	2001
Animal Health	88	92	82
Medical Nutrition	82	4	51
Infant & Baby	254	227	230
CIBA Vision	153	118	102
Divisional Management	(39)		
Consumer Health ongoing	**1,320**	**946**	**899**
Divested Health & Functional Food activities		140	(4)
Consumer Health	**1,320**	**1,086**	**895**
Corporate and other income/expense	146	115	53
Operating income	**5,889**	**5,092**	**4,325**
Result from associated companies	(200)	(7)	83
Financial income, net	379	613	284
Taxes	(1,008)	(959)	(844)
Minority interests	(44)	(14)	(12)
Net income	**5,016**	**4,725**	**3,836**

(1) 2002 and 2001 figures have been restated to reflect a change in classification of certain expenses from Marketing & Sales to Cost of Goods Sold, Research & Development and General & Administration expenses.

2003 Compared to 2002

The following compares our results in the year ended December 31, 2003 to those of the year ended December 31, 2002. Our analysis is divided as follows:

1. *Overview*
2. *Sales by Division and Business Unit*
3. *Operating Expenses*
4. *Operating Income by Division and Business Unit*
5. *Net Income*

1. Overview

In US dollars, our sales in 2003 increased by 19% over 2002 to $24.9 billion (+11% in local currencies); operating income grew by 16% to $5.9 billion; net income increased by 6% to $5.0 billion; and cash flow from operating activities increased by 27% to $6.7 billion.

Our Pharmaceuticals Division accounted for 64% of our total sales and our Consumer Health Division accounted for 36%. The two Divisions generated 77% and 23% of divisional operating income, respectively.

Geographically, 45% of our sales were generated in the North American Free Trade Association (NAFTA) region (41% in the USA), 35% in Europe and 20% in the rest of the world.

Sales growth was driven by a volume increase of 8%. All Business Units except Sandoz and CIBA Vision benefited from small price increases which in total amounted to 1%. The sales increase due to acquisitions was 2%. The sales performance in US dollars benefitted from a 8% positive currency effect as the US dollar weakened on average 16% against the Swiss franc, 8% against the yen and 20% against the euro.

Our operating margin in 2003 was 23.7% of sales, a decrease of 0.7 percentage points over the 24.4% of sales of the previous year. As a percentage of sales, productivity gains and improvements in the product mix led to a 0.2 percentage point reduction in the Cost of Goods Sold, while Marketing & Sales expenses decreased by 0.7 percentage points, although still increasing by 17% over 2002, to support product launches and key growth drivers. Research & Development investments were increased by 32% mainly due to increased development expenses, especially connected with milestone payments on in-licensed compounds, and due to the Pharmaceuticals Division research strategy of establishing a new facility in Cambridge, US. General & Administration expenses grew by 21%, 2% more than sales due to several factors including the write-down of certain investments in biotechnology companies, exchange rate movements and royalty payments.

As a result of all these factors, operating income increased 16% in US dollars to $5.9 billion.

2. Sales by Division and Business Unit

The following table sets forth selected sales data for each of the periods indicated.

	Year ended December 31,			
	2003	**2002**	**Change in $**	**Change in local currencies**
	($ millions)	**($ millions)**	**(%)**	**(%)**
Sales				
Pharmaceuticals	**16,020**	**13,528**	**18**	**11**
Sandoz	2,906	1,817	60	47
OTC	1,772	1,521	17	7
Animal Health	682	623	9	3
Medical Nutrition	815	711	15	3
Infant & Baby	1,361	1,333	2	3
CIBA Vision	1,308	1,135	15	7
Consumer Health ongoing	**8,844**	**7,140**	**24**	**16**
Divested Health & Functional Food activities		209		
Consumer Health	**8,844**	**7,349**	**20**	**12**
Total	**24,864**	**20,877**	**19**	**11**

Pharmaceuticals Division

Our core Pharmaceuticals business sustained above market sales growth throughout the year to deliver an 18% rise in sales (11% in local currencies). We moved up to the number five position in the global healthcare ranking (based on November 2003 IMS data) as we captured

further segment share in the key US market (sales: +15% in US dollars), in Japan (sales: +23%; +14% in local currencies), the second largest single market, as well as in Europe (sales: +25%; +6% in local currencies). Based on latest available data (IMS), our overall share of the global healthcare market has risen to 4.4%.

Our cardiovascular (+36%; +29% in local currencies) and oncology franchises (+36%; +26% in local currencies) continued to be the main drivers, led in particular by the flagship brands *Diovan, Lotrel, Lescol, Gleevec/Glivec*, *Zometa* and *Femara*.

Newly launched products made further in-roads; *Zelnorm/Zelmac* generated revenues of $165 million, with US total and new prescriptions growing 32% in the fourth quarter. Meanwhile, sales of *Elidel* reached $235 million, as the product extended its position as the number-one branded eczema treatment worldwide.

Primary Care

Diovan (+46%; +38% in local currencies; US: +42%) became in 2003 the world's leading angiotensin receptor blocker (ARB) and has continued to capture further market share from its competitors. With the heart failure indication now approved in more than 40 markets, the flagship brand continued to outpace its fast-growing ARB market segment, with year-to-date sales in the US surpassing the $1 billion mark by December.

The fourth quarter was marked by the publication of the VALIANT mega-trial at the American Heart Association Scientific Session. The results showed that *Diovan* reduces the risk of death by 25% in post-myocardial infarction patients. A supplemental new drug application based on these results has already been filed in the US.

Diovan HCT (valsartan + hydrochorothiazide) became the second most prescribed product in the combination ARB segment (mono and combination therapy) in the US. This rapid growth was powered by the roll-out of new dosage forms, the heart failure indication and new treatment guidelines. In Germany, the flagship brand secured the number-one rank, buoyed by the success of *Co-Diovan* 160/12.5 mg.

Lotrel (US: +20%), the leading combination treatment for hypertension, posted strong full-year prescription growth while fourth-quarter sales were spurred by a disease awareness campaign launched in August. Overall, the brand steadily gained market segment share as a result of new Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC7) guidelines recommending more aggressive treatment; a new focus on patients who are not controlled by ACE inhibitors and calcium channel blockers; and the successful launch of the new dosage strength, which add efficacy and dosing flexibility.

Lescol (+27%; +18% in local currencies; US: +19%; cholesterol reduction) continued strong sales growth driven by proven benefits in high-risk patients, the successful rollout of the XL (extended release) formulation in France, Italy and Spain and the launch of the secondary prevention indication in the US.

Trileptal (+42%; +39% in local currencies; US: +43%; epilepsy) clearly outpaced its market. In August, the FDA granted approval for the use of *Trileptal* as monotherapy in children. *Trileptal* is now indicated for the treatment of partial seizures as a monotherapy and adjunctive therapy in adults and children of 4 years and upwards.

Elidel (+147%; +144% in local currencies; US: +125%; non-steroid eczema treatment) achieved full year sales of $235 million, generated predominantly in the US. In less than two years since its first launch, *Elidel* is the number-one branded prescription treatment for eczema and is now available in more than 38 markets.

Zelnorm/Zelmac (irritable bowel syndrome with constipation) revenues reached $165 million (US: $132 million) reflecting the product's therapeutic benefits and the increase in disease awareness. Total US prescriptions as well as new prescriptions recently increased more than 32%. *Zelnorm/Zelmac* has now been launched in 39 countries and was filed, in the fourth

quarter, for the new indication of chronic constipation in the US.

Oncology

Gleevec/Glivec (+84%; +68% in local currencies; US: +41%), for chronic myeloid leukemia (CML) and gastro-intestinal stromal tumors (GIST), continued to grow dynamically, boosted by its use as first-line therapy and its approval for GIST in the US, Europe and Japan. The number of patients enrolled in the *Gleevec/Glivec* Patient Assistance Program rose to more than 8,000 worldwide, providing treatment to many needy patients who otherwise would not have access.

Zometa (+83%; +74% in local currencies; US: +59%), the most prescribed intravenous bisphosphonate for bone metastases, continued to post dynamic growth and is on track for additional sales volume growth in 2004. Several launches in Europe fueled additional growth, as did the continued expanded use into a number of tumor types including lung, prostate, multiple myeloma, and breast.

Sandostatin (+14%; +7% in local currencies; US: +13%; acromegaly and carcinoid syndrome) sales continued to grow, driven by US sales.

Femara (first-line therapy for advanced breast cancer in postmenopausal women) achieved a 30% rise (+18% in local currencies; US: + 22%) in sales supported by its strong profile and the landmark results of the MA-17 study published in the fourth quarter. These showed a 43% reduction in the risk of cancer recurrence, in addition to significantly improved disease-free

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survival in postmenopausal women with early breast cancer, who had completed five years of tamoxifen therapy.

Ophthalmics

Visudyne (+24%; +16% in local currencies; US: +8%; treatment in age-related macular degeneration) continued to post overall growth, benefiting from increased market penetration and strong sales in Europe, Latin America and the Asia Pacific regions.

Transplantation

Neoral/Sandimmun (immunosuppression) sales declined only modestly (-10% in local currencies) despite the use of lower dosing regimen in the US, in addition to generic competition and compulsory price-cuts in Germany and Italy. Sales momentum was sustained in Japan even though reimbursement was reduced by the authorities.

Myfortic, the new enteric-coated formulation of mycophenolate sodium used to prevent organ rejection, gained approval in 27 countries by the end of 2003.

Mature Products

Voltaren (+1%; -6% in local currencies; US: -33%; anti-inflammatory) continued to compete well against the COX-2 inhibitor class of drugs as well as generics.

Cibacen/Lotensin/Cibadrex (-6%; -9% in local currencies; US:-9%; antihypertensive) was granted a pediatric exclusivity (*Lotensin*) in July 2003 by the FDA in the US.

Top 20 Pharmaceutical Products 2003

Brands	Therapeutic Area	United States	% change in $	Rest of the World	% change in local currencies	Total	% change in $	% change in local currencies
		($ millions)		($ millions)		($ millions)		
Diovan/Co-Diovan	Hypertension	1,107	42	1,318	34	2,425	46	38
Gleevec/Glivec	Chronic myeloid leukemia/Gastro-intestinal stromal tumors	299	41	829	82	1,128	84	68
Neoral/Sandimmun	Transplantation	216	(21)	804	(6)	1,020	(2)	(10)
Lamisil (group)	Fungal infections	428	2	550	9	978	12	5
Zometa	Cancer complications	574	59	318	118	892	83	74
Lotrel	Hypertension	777	20			777	20	20
Lescol	Cholesterol reduction	309	19	425	18	734	27	18
Sandostatin (group)	Acromegaly	318	13	377	2	695	14	7
Voltaren (group)	Inflammation/pain	8	(33)	591	(5)	599	1	(6)
Cibacen/Lotensin/Cibadrex	Hypertension	306	(9)	127	(8)	433	(6)	(9)
Top ten products		**4,342**	**21**	**5,339**	**20**	**9,681**	**28**	**20**
Trileptal	Epilepsy	305	43	92	27	397	42	39
Miacalcic	Osteoporosis	239		150	(14)	389	(1)	(6)
Tegretol (incl. CR/XR)	Epilepsy	122	1	262	(1)	384	5	
Exelon	Alzheimer's disease	181	8	186	19	367	21	13
Visudyne	Wet form of age-related macular degeneration	181	8	176	27	357	24	16
Leponex/Clozaril	Schizophrenia	86	(28)	223	(2)	309	(4)	(12)
Foradil	Asthma	9	(61)	280	2	289	10	(4)
Elidel	Eczema	205	125	30	575	235		144
Famvir[1]	Viral infections	146	(7)	87	19	233	5	
HRT Range	Hormone replacement	125	(9)	106	(24)	231	(11)	(16)
Top twenty products		**5,941**	**18**	**6,931**	**16**	**12,872**	**22**	**17**
Rest of portfolio		643	(9)	2,505	(9)	3,148	5	(9)
Total		**6,584**	**15**	**9,436**	**8**	**16,020**	**18**	**11**

(1) 2002 restated because of transfer to other Business Units.

Consumer Health Division

Sales in our Consumer Health Division's ongoing businesses grew a substantial 24% (+16% in local currencies) driven mainly by the Sandoz generics Business Unit, and fueled by above-market sales growth throughout the other businesses, of which OTC, Medical Nutrition and CIBA Vision all delivered double-digit sales increases in US dollars.

Sandoz

Sales at Sandoz rose 60% (+47% in local currencies) to $2.9 billion, driven by the US Generic Pharmaceuticals Business and the Lek acquisition, which contributed 38 percentage points to sales growth. The US sales increased by 56% fuelled by the strong sales of AmoxC (the generic version of Augmentin®) and by the successful roll-out of prescription loratadine (a generic version of the allergy treatment Claritin®). Further impetus was added through the roll-out of citalopram in the UK (a generic version of the anti-depressant Celexa®) and of omeprazole in the US (a generic version of the ulcer and heartburn treatment Prilosec®).

The Industrial Business posted a sales increase of 12% in US dollars and a 6% decrease in local currencies. Sandoz also continued its efforts to develop its new Biopharmaceuticals Business, focused on the manufacture of active ingredients, mostly modern recombinant products.

OTC (over-the-counter self medication)

In 2003, OTC sales rose 17% (7% in local currencies) to $1.8 billion, led by *Nicotinell/Habitrol* (smoking cessation), *Lamisil* (topical antifungal), and by *Ex-Lax/Benefiber* (laxative) with US private-label loratadine also contributing to overall sales growth.

Animal Health

Sales were up 9% in US dollars or 3% in local currencies to $682 million.

Sales at the companion animal franchise grew in double-digits, driven in particular by strong market share gains of the new brands *Deramaxx* (pain and inflammation control associated with osteoarthritis in dogs) and *Milbemax* (intestinal worm control in dogs and cats). *Fortekor* (heart/kidney disease), strengthened by a novel palatable formulation for cats, complemented results again with a sales increase well above market growth.

In the farm-animal franchise *Agita*, the innovative farm fly control product consistently added to sales, while the therapeutic anti-infectives business contended with increased generic competition especially in the pig market.

Medical Nutrition

Sales reached $815 million, up 15% in US dollars (and +3% 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"*.

Infant & Baby

Sales grew 2% (3% in local currencies) outpacing industry growth and leading to overall sales of $1.4 billion. The major contributor was *Gerber* in the US, spurred by innovations in the Juice, Graduates, and *Tender Harvest* lines and the success of the *Lil' Entrees* line of microwavable convenience trays targeted at the toddler segment.

CIBA Vision

Sales grew 15% in US dollars terms and rose 7% in local currencies to $1.3 billion, driven by the growth of *Focus DAILIES* and *Focus NIGHT & DAY* lenses which allowed the company to maintain leadership of the daily disposables and continuous wear categories. *Focus DAILIES Toric*, the world's first and only daily disposable lens for astigmatism correction, was launched also in the US and Japan following

last year's introduction in Europe. *FreshLook* colored lenses remained the leading brand in the cosmetic lens segment, supported by the launch of *FreshLook Radiance* and *FreshLook Dimensions*. More emphasis was put on direct to consumer advertising with new successful TV and print campaigns for *Focus NIGHT & DAY* and *FreshLook*.

Despite competing in a shrinking market, sales of lens care products were flat versus the prior year, supported by the launch of *AOSEPT ClearCare* in US and *SOLO-Care AQUA* in selective European countries. Sales of *FreshLook Care* in Japan continued to grow.

The ophthalmic surgical business contributed growing sales during the year. In August 2003, CIBA Vision announced its intention to pursue strategic alternatives for this business, including its potential sale. Agreements have since been reached with certain third parties to sell to them certain assets of the surgical business.

3. Operating Expenses

We changed our 2002 income statement classification by transferring $336 million from Marketing & Sales to other expense categories (Cost of Goods Sold ($86 million) relating to certain finished goods, warehousing and distribution expenses; Research & Development expenses ($55 million) relating to certain Phase IV clinical trials performed after launch of a new product; General & Administration expenses ($195 million) relating to certain third party royalty expenses on in-licensed products). The following table sets forth our operating expenses.

	Year ended December 31,		
	2003	**2002**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Sales	**24,864**	**20,877**	**19**
Cost of Goods Sold	(5,894)	(4,994)	18
Marketing & Sales	(7,854)	(6,737)	17
Research & Development	(3,756)	(2,843)	32
General & Administration	(1,471)	(1,211)	21
Operating income	**5,889**	**5,092**	**16**

Cost of Goods Sold

Cost of Goods Sold decreased as a percentage of sales from 23.9% in 2002 to 23.7% in 2003. This was mainly due to continued improvements in productivity and a favorable product mix in our Pharmaceuticals Division.

Marketing & Sales

Marketing & Sales expenses as a percentage of sales decreased by 0.7% over 2002 to 31.6% of sales.

Research & Development

Research & Development expenses increased 32% owing to in-licensing deals in our Pharmaceuticals Division and the build-up of the Cambridge research facility. As a percentage of sales, Research & Development was 15.1% (2002: 13.6%).

General & Administration

General & Administration expenses increased to 5.9% of sales in 2003 from 5.8% in 2002 owing to several factors including the impairment of tangible and intangible assets of $136 million and write-down of certain financial investments, including biotechnology ventures, of $80 million, exchange rate movements and royalty payments. Conversely General & Administration expenses were reduced by the release of

$90 million of legal provisions (at Corporate and Sandoz level) as a result of a litigation settlement with GlaxoSmithKline.

4. Operating Income by Division and Business Unit

Operating income rose 16% to $5.9 billion in 2003 compared to 2002 and the operating margin decreased 0.7 percentage points to 23.7% (2002: 24.4%). The following table sets forth selected operating income data for each of the periods indicated.

	Year ended December 31,		
	2003	**2002**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Pharmaceuticals	**4,423**	**3,891**	**14**
Sandoz	473	265	78
OTC	309	240	29
Animal Health	88	92	(4)
Medical Nutrition	82	4	
Infant & Baby	254	227	12
CIBA Vision	153	118	30
Divisional Management	(39)		
Consumer Health ongoing	**1,320**	**946**	**40**
Divested Health & Functional Food activities		140	
Consumer Health	**1,320**	**1,086**	**22**
Corporate and other income/expense	146	115	27
Total	**5,889**	**5,092**	**16**

Pharmaceuticals Division

Earnings growth accelerated in the year as sales continued to expand strongly. The Cost of Goods Sold, as well as investments in Marketing & Sales slightly reduced as a percentage of Division's sales compared to the prior year, Research & Development increased significantly as considerable payments related to development milestones and attractive in-licensing deals were completed. Product-mix changes and productivity gains in the Cost of Goods Sold continued to drive gross profit improvements. Research & Development expenses reached 19.1% of Divisional sales (reflecting the sustained high-level investment in the new Cambridge facilities and in-licensing opportunities). General & Administration expenses grew from 5.9% to 6.0% of Divisional sales owing to several factors including the write-down of certain financial investments in biotechnology ventures, exchange rate movements, royalty payments and increased product liability insurance costs. This was partially offset by one time gains on the sale of non-core products, primarily the *Fioricet* and *Fiorinal* lines for $178 million.

During 2003, our Pharmaceuticals Division completed a number of transactions to strengthen its product portfolio. In April, we acquired the urinary incontinence treatment *Enablex* (darifenacin) from Pfizer for a total of up to $225 million, part of which is still conditional on certain marketing approvals in

the US and EU. In 2003, we also acquired the rights to the IL1-trap compound from Regeneron and the rights to develop and market Lucentis outside North America from Genentech. These transactions resulted in $151 million of milestone payments. In May, we acquired 51% of the capital stock of Idenix Pharmaceuticals Inc. of Cambridge, Massachusetts, for an initial payment of $255 million.

Consumer Health Division

Operating income from the ongoing business of our Consumer Health Division rose 40% in the year, outpacing sales and driven in particular by Sandoz (+78%), where volume expansions and productivity gains, more than offset increased investments in Marketing & Sales and Research & Development. Apart from Sandoz, CIBA Vision (+30%), Medical Nutrition and OTC (+29%), all achieved considerable increases in operating income, the latter benefiting from the exceptional contribution of loratadine.

Overall, in Consumer Health continued productivity gains, lower costs of certain raw materials and product-mix improvements contributed to a reduction in the Cost of Goods Sold as a percentage of sales. Marketing & Sales investments were maintained at a high level in order to drive recently launched products and to support key brands, however the increase was less than sales growth. On the other hand, Research & Development investments increased overproportionally, which was mainly due to the expansion of internal Research & Development capabilities at Sandoz, licensing agreements and other initiatives to accelerate innovation. General & Administration expenses increased mainly on account of the impairment of intangible assets of $72 million relating to Azupharma, Germany. The total increase was, however, less than sales owing to the release of $49 million of provisions following the successful conclusion of a litigation with GlaxoSmithKline. With almost all Business Units achieving margin improvements, the Division's ongoing profit margin improved 1.7 percentage points to 14.9%.

Sandoz

Operating income increased significantly by 78% over 2002, fueled by sales growth especially related to the acquistion of Lek, productivity gains and a stronger focus on higher margin products and favorable product mix. Research & Development investments increased 90% to $263 million due to product developments and the funding of Research & Development in the US. Total General & Administration expenses benefitted from a release of $49 million of litigation provisions following the successful conclusion of negotiations with GlaxoSmithKline. The operating margin rose 1.7 percentage points to 16.3%.

OTC (over-the-counter self medication)

Operating income increased 29% over the year to $309 million, as a result of sales growth led by *Nicotinell/Habitrol* and the launch of private label loratadine in the US and the non-recurrence of exit costs from a Japanese joint venture. The operating margin increased 1.6 percentage points to 17.4%.

Animal Health

2003 operating income fell 4% to $88 million, leading to an operating margin of 12.9% (2002: 14.8%). Operating costs increased due to Marketing & Sales investments focused on recently launched products and due to additional Research & Development on essential project studies.

Medical Nutrition

Operating income increased to $82 million as a result of productivity gains, lower raw material costs and product mix improvements resulting from more focus on disease specific segments. The operating margin increased to 10.1% from 0.6% in 2002 or from 4.5% when $28 million of exceptional items related to restructuring the Business Unit and other one time items are excluded from the 2002 operating income.

Infant & Baby

2003 operating income rose 12% to $254 million. Operating margin increased to 18.7% from 17.0% in 2002 when there were $27 million of impairment charges.

CIBA Vision

Operating income reached $153 million, an increase of 30% over the year. This operational result was achieved due to the margin on the additional sales and reduction in structural costs, partially offset by increased investment in advertising and promotion activities and a $22 million charge for asset impairments. Operating margin increased to 11.7% in 2003 compared with 10.4% in 2002.

Divested Health & Functional Food activities

The 2002 operating income of $140 million includes a divestment gain of $132 million after related restructuring charges arising on the divestment of our former Food & Beverage business. In addition there was a net $8 million operating income from these activities after taking into account $18 million of goodwill impairment charges.

Corporate and Other Income/Expense

Net corporate income totaled $146 million, $31 million more than in the prior year. Higher income from charging share and share option plan costs to the operations and the settlement of a litigation for $41 million less than the provision, more than offset increased investments in corporate research, the negative currency translation effects on non-US dollar costs, and lower pension income.

5. Net income

The following table sets forth selected income statement data for the periods indicated.

	Year ended December 31,		
	2003	**2002**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Operating income	**5,889**	**5,092**	**16**
Results from associated companies	(200)	(7)	
Financial income, net	379	613	(38)
Income before taxes and minority interests	**6,068**	**5,698**	**6**
Taxes	(1,008)	(959)	5
Income before minority interests	**5,060**	**4,739**	**7**
Minority interests	(44)	(14)	
Net income	**5,016**	**4,725**	**6**

Results from associated companies

Associated companies are accounted for using the equity method where we generally own between 20% and 50% of the voting shares of such companies. Income from associated companies is mainly derived from our investments in Roche Holding AG and Chiron Corporation.

Our 42% interest in Chiron contributed pre-tax income of $134 million (2002: $107 million). Our 33.3% (just under one third; 2002: 32.7%) interest in Roche voting shares, which represents a 6.3% (2002: 6.2%) interest in the total Roche equity instruments generated a pre-tax loss of $354 million (2002:

$116 million loss), $269 million of which was due to our share in Roche's unexpected loss of CHF 4.0 billion in 2002, booked only in 2003. The remainder represents an estimate of our share ($185 million) in Roche's 2003 pre-tax income. This share of pre-tax income is reduced by a $270 million goodwill and intangible depreciation charge arising from allocating the purchase price to tangible and intangible assets and goodwill.

Our share of the net income of both Roche and Chiron is based upon analysts' estimates. Any differences between these estimates and actual results will be adjusted in 2004. In total, associated companies resulted in an overall expense of $200 million in 2003 (2002: $7 million).

Financial income, net

Amid persistently challenging equity market conditions, lower interest rates and a lower level average net liquidity than in the prior year, net financial income declined 38% or $234 million.

Taxes

Despite increased profits, the tax charge of $1,008 million increased only $49 million over the prior year. Our effective tax rate (taxes as a percentage of income before tax) was 16.6% in 2003 compared to 16.8% in 2002.

Our expected tax rate (weighted average tax rate based on the result before tax of each subsidiary) was 14.8% in 2003 compared to 15.3% in 2002. Our effective tax rate is different from the expected tax rate due to the income statement effects of equity accounting for associated companies of 1.9% (2002: 0.3%) and various permanent tax adjustments to expenditures and income. For details of the main elements contributing to the difference, see note 6 to the consolidated financial statements.

Net income

Net income as a percentage of total sales decreased from 22.6% in 2002 to 20.2% in 2003 principally due to lower financial income and the negative impact of the results of associated companies.

Return on average equity decreased from 17.7% in 2002 to 17.1% in 2003.

2002 Compared to 2001

The following compares our results in the year ended December 31, 2002 to those of the year ended December 31, 2001. Our analysis is divided into the following sections:

1. *Overview*
2. *Sales by Division and Business Unit*
3. *Operating Expenses*
4. *Operating Income by Division and Business Unit*
5. *Net Income*

1. Overview

In US dollars, our sales in 2002 increased by 11% over 2001 to $20.9 billion (+11% in local currencies); operating income grew by 17.7% to $5 billion and net income increased by 23% to $4.7 billion.

Our Pharmaceuticals Division accounted for 65% of the Group's total sales and our Consumer Health Division accounted for 35%. The two Divisions generated 76% and 21% of our total operating income, respectively. In 2002, our Consumer Health Division was reorganized to include our Sandoz,

OTC self-medication, Animal Health, Medical Nutrition (including our Nutrition & Santé unit), Infant & Baby, and our CIBA Vision Business Units.

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 Sandoz and CIBA Vision benefited from small price increases which in total amounted to 1%. The sales increase due to acquisitions was negligible.

Our operating margin in 2002 was 24.4% of sales, an increase of 1.3% percentage points over the 23.1% of sales of the previous year. Cost of Goods Sold increased by 5%, while Marketing and Sales expenses increased by 11%.

Research and Development investments were increased 12% mainly due to the new Pharmaceuticals Division research strategy and the establishment of our new facility in Cambridge, Massachusetts.

As a result of all these factors, operating income increased over proportionally, climbing 18% in US dollars to $5 billion.

2. Sales by Division and Business Unit

The following table sets forth selected sales data for each of the periods indicated.

	Year ended December 31,			
	2002	**2001**	**Change in $**	**Change in local currencies**
	($ millions)	**($ millions)**	**(%)**	**(%)**
Sales				
Pharmaceuticals	**13,528**	**11,965**	**13**	**13**
Sandoz	1,817	1,444	26	25
OTC	1,521	1,507	1	(1)
Animal Health	623	570	9	10
Medical Nutrition	711	661	8	4
Infant & Baby	1,333	1,319	1	3
CIBA Vision	1,135	1,059	7	6
Consumer Health ongoing	**7,140**	**6,560**	**9**	**6**
Divested Health & Functional Food activities	209	237		
Consumer Health	**7,349**	**6,797**	**8**	**7**
Total	**20,877**	**18,762**	**11**	**11**

Pharmaceuticals Division

Sales increased 13% in US dollars and in local currencies from $12.0 billion in 2001 to $13.5 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 in local currencies 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 $1.7 billion, making it our 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. Our second flagship anti-hypertensive, *Lotrel,* generated sales of $650 million, 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 $577 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 $614 million, making it our fifth biggest-selling product. Another leading Oncology brand, *Sandostatin*, continued to post substantial double-digit growth, with sales reaching $607 million, despite the launch of generic competitors in Europe. *Zometa* (bone metastases and complications of a broad range of cancers) achieved sales of $488 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 $1 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 $596 million.

Overall, the Pharmaceuticals Division's top ten products generated $7.6 billion, reflecting an increase of 32% in local currencies, while the top twenty products expanded sales by 17% in local currencies to $10.5 billion. Unless otherwise indicated, all percentages set forth in the following section refer to local currencies.

Primary Care

Primary Care sales grew 13% in local currencies (+14% in US dollar) primarily due to strong sales growth of *Diovan* and the other key products discussed below.

Diovan (+49% US: +40%; hypertension) became our best selling product ever, further extending its category leadership in the US to more than 35% of total angiotensin II receptor blocker prescriptions. Backed by the Val-Heft study data showing improved survival, reduced hospitalization and cost effectiveness 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. While 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% in 2002.

Elidel (eczema) was launched in 13 countries, including the US, and completed the mutual recognition procedure in Europe. Sales in 2002 reached $95 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 (irritable bowel syndrome with constipation) 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 $45 million.

Oncology

Our Oncology business unit gained further market share and posted strong sales growth of 28% in local currencies (+30% in US dollar).

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 $614 million, making it our fifth biggest selling 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), launched in 2002, achieved sales of $488 million, making it the world's fastest growing bisphosphonate used for bone metastases. 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 $607 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 $175 million. *Femara* is the US leader in the first-line metastatic breast cancer setting.

Ophthalmics

Ophthalmics' sales rose 7% in local currencies (+8% in US dollar), driven by *Visudyne.*

Visudyne (+27%; US: +19%; treatment in macular degeneration) posted sales of $287 million, and has 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 (-4% in $) 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 (-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 intended for use in combination with *Neoral* and corticosteroids to prevent rejection episodes in patients with kidney transplants, was submitted for approval in the EU and US.

Mature Products

The mature brands reported a 10% sales rise in local currencies (8% in US dollar) 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 20 Pharmaceutical Products 2002

Brands	Therapeutic Area	United States	% change in $	Rest of the World	% change in local currencies	Total	% change in $	% change in local currencies
		($ millions)		($ millions)		($ millions)		
Diovan/Co-Diovan	Hypertension	780	40	882	58	1,662	49	49

							% change	
Neoral/Sandimmun	Transplantation	274	(12)	762	(2)	1,036	(5)	(5)
Lamisil (group)	Fungal infections	420	(3)	453	12	873	5	4
Lotrel	Hypertension	650	35	0		650	35	35
Gleevec/Glivec	Chronic myeloid leukemia	212	103	402	741	614	304	303
Sandostatin (group)	Acromegaly	282	39	325	12	607	25	23
Voltaren (group)	Inflammation/pain	12	(18)	584	(3)	596	(6)	(3)
Lescol	Cholesterol reduction	260	13	317	23	577	19	18
Zometa	Cancer complications	362	NA	126	NA	488	NA	NA
Cibacen/Lotensin/Cibadrex	Hypertension	336	14	123	(4)	459	10	9
Top ten products		**3,588**	**35**	**3,974**	**28**	**7,562**	**32**	**32**
Miacalcic	Osteoporosis	239	(9)	155	(4)	394	(6)	(7)
Tegretol (incl. CR/XR)	Epilepsy	121	(22)	243	1	364	(10)	(8)
Leponex/Clozaril	Schizophrenia	120	(12)	203	8	323	1	0
Exelon	Alzheimer's disease	167	28	137	24	304	27	26
Visudyne	Wet form of age-related macular degeneration	168	19	119	40	287	28	27
HRT Range	Hormone replacement	138	5	123	(10)	261	(2)	(3)
Trileptal	Epilepsy	213	111	66	49	279	89	91
Aredia	Cancer complications	81	(84)	194	(27)	275	(63)	(64)
Foradil	Asthma	23	136	239	4	262	13	10
Famvir	Viral infections	157	17	64	7	221	15	14
Top twenty products		**5,015**	**15**	**5,517**	**19**	**10,532**	**18**	**17**
Rest of portfolio		719	(6)	2,277	0	2,996	(1)	(1)
Total		**5,734**	**12**	**7,794**	**13**	**13,528**	**13**	**13**

NA
Not applicable as no or insignificant prior year sales.

Consumer Health Division

Sales of our Consumer Health Division increased in local currencies by 7%, and increased in US dollars terms from $6.8 billion in 2001 to $7.3 billion in 2002. The following are specific comments on the results of the Business Units within the Consumer Health Division:

Sandoz

Sales rose 26% in US dollars or 25% in local currencies to $1.8 billion, led by the US and Europe, the launch of new products, and expansion into new markets.

The Generic Pharmaceuticals Business with finished forms lifted sales by 35% in local currencies, driven by the US performance and new launches, in particular the US launch of amoxicillin/potassium clavulanate, 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 Business franchise posted an increase of 9% in US dollars and a 3% increase in local currencies. A new Biopharmaceuticals Business franchise was added, focused on the manufacture of active ingredients, mostly modern recombinant products.

In November, our Business Unit successfully completed its friendly take-over bid for Lek Pharmaceuticals d.d., Slovenia's leading drug-maker. The $0.9 billion acquisition opens up a leading position for our Sandoz business in Central and Eastern Europe, and in the countries of the former Soviet Union. No sales were recorded from this acquisition in 2002 due to the fact that the acquisition closed late in the year (resulting in immaterial post-closing sales) and the fact that we were still in the process of integrating Lek into our reporting systems.

OTC (over-the-counter self medication)

Sales were 1% off their 2001 level in US dollars 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 Emulgel* (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 9% in US dollars or 10% in local currencies to $623 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 currencies 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 represented 8% of Animal Health's revenues in 2002.

Medical Nutrition

Combined sales reached $711 million, up 8% in US dollars and 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 were 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

Sales rose by 1% in US dollars terms and in local currencies by 3%, which was above the industry average, to $1.3 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 8% rise in sales helped by the successful re-launch of its infant skin care line.

CIBA Vision

Sales increased 7% in US dollars terms and rose 6% in local currencies to $1.1 billion, driven by the high-volume lens franchise, which outpaced the market. Strong selling brands included *Focus DAILIES, Focus NIGHT & DAY,* and *FreshLook* colored lenses, supported by the launch of the *FreshLook Radiance* line in several markets including the US, which launched in December. *Focus DAILIES Toric,* the world's first and only daily disposable lens for astigmatism correction, was launched in Europe and was 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

We divested our Food & Beverage business, including the Ovaltine®, Caotina® and Lacovo® brands, at the end of November 2002 to Associated British Foods for $270 million. 2002 sales from this divested business, up until the divestment, amounted to $209 million (2001: $237 million).

3. Operating Expenses

We changed our 2002 and 2001 income statement classification by transferring $366 million (2001: $286 million) from Marketing & Sales to other expense categories (Cost of Goods Sold of $86 million (2001: $81 million) relating to certain finished goods, warehousing and distribution expenses; Research & Development expenses of $55 million (2001: $43 million) relating to certain Phase IV clinical trials performed after launch of a new product; General & Administration expenses of $195 million (2001: $162 million) relating to certain third party royalty expenses on in-licensed products). The following table sets forth our operating expenses for each of the periods indicated.

	Year ended December 31,		
	2002	**2001**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Sales	**20,877**	**18,762**	**11**
Cost of Goods Sold	(4,994)	(4,744)	5
Marketing & Sales	(6,737)	(6,060)	11
Research & Development	(2,843)	(2,528)	12
General & Administration	(1,211)	(1,105)	10
Operating income	**5,092**	**4,325**	**18**

Cost of Goods Sold

Cost of Goods Sold decreased as a percentage of sales from 25.3% in 2001 to 23.9% in 2002. This was mainly due to continued improvements in productivity and a favorable product mix in Pharmaceuticals.

Marketing & Sales

Marketing & Sales expenses as a percentage of sales remained at 32.3% of sales as slightly higher investments in the Pharmaceuticals 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 13.6% in 2002, a small increase over the 2001 level of 13.5%.

General & Administration

Cost containment, especially in Pharmaceuticals, and the recording of $172 million of hedging gains, resulted in a negligible increase in General & Administration expenses. As a percentage of sales, General & Administration overheads fell to 5.8% in 2002 from 5.9% in 2001.

4. Operating Income by Division and Business Unit

The following table sets forth selected operating income data for each of the periods indicated.

	Year ended December 31,		
	2002	**2001**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Pharmaceuticals	**3,891**	**3,377**	**15**
Sandoz	265	166	60
OTC	240	268	(10)
Animal Health	92	82	12
Medical Nutrition	4	51	(92)
Infant & Baby	227	230	(1)
CIBA Vision	118	102	16
Consumer Health ongoing	**946**	**899**	**5**
Divested Health & Functional Food activities	140	(4)	
Consumer Health	**1,086**	**895**	**21**
Corporate and other income/expense	115	53	117
Total	**5,092**	**4,325**	**18**

Our operating income increased by 18% from $4.3 billion in 2001 to $5.1 billion in 2002. Our operating margin was 24.4% of sales, an increase of 1.3 percentage points compared with 2001 (23.1%).

Pharmaceuticals Division

Our Pharmaceuticals Division's operating income rose 15% to $3.9 billion in 2002 with the Division's operating margin improving by 0.6 percentage points over the year to 28.8%. As a percentage of sales, the

Cost of Goods Sold improved 1.0 percentage points due to product mix changes and productivity gains. Marketing & Sales investments increased slightly as a percentage of sales to drive the launches of *Elidel* and *Zelnorm/Zelmac*.

Implementation of the new research strategy and the establishment of the new Cambridge research facility led to a 13% increase in research & development investments, which remained at 17% of sales.

Included in General & Administration expenses were currency hedging gains of $172 million which were offset by $202 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 $52 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

Our Consumer Health Division's operating income increased by 21% over the year from $0.9 billion in 2001 to $1.1 billion in 2002. The Division's ongoing operating income, excluding the impact of the divested Health & Functional Food activities, increased by 5% to $0.9 billion. As explained below, increases in the operating income of Sandoz, Animal Health and CIBA Vision Business Units were offset by falls in the Division's other Business Units.

Sandoz

Operating income increased significantly by 60% 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 & Sales expenses were reduced as a percentage of sales.

Research & Development investments increased 39% to $139 million due to product developments and the funding of the new Sandoz 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 14.6%. We did not record any contribution to operating income from the completed Lek acquisition.

OTC (over-the-counter self medication)

Operating income dropped 10% over the year to $240 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 & Sales expenses. The operating margin fell 2 percentage points to 15.8%.

Animal Health

2002 operating income increased 12% to $92 million, leading to an operating margin of 14.8% (2001: 14.4%). Apart from acquisition-related charges, operating costs were reduced significantly as Marketing & Sales investments were focused on key new launches, while Research & Development investments were maintained as a percentage of sales.

Medical Nutrition

Operating income fell 92% to $4 million as a result of restructuring provisions of $28 million and a one-time provision for potential additional value-added tax charges in Germany. As a result, the operating margin fell to 0.6% from 7.7% in 2001. Excluding the exceptional items of $28 million operating income would have been $32 million and would have produced an operating margin of 4.5%.

Infant & Baby

2002 operating income fell 1% to $227 million. Operating income was affected by one-off goodwill impairment charges of $27 million primarily related to the Hiborn acquisition in Brazil of 1998. As a result, the operating margin fell to 17.0% from 17.4% in 2001. Excluding this impairment of $27 million, the operating margin would have been 19.0%.

CIBA Vision

Operating income reached $118 million. Investments in Marketing & Sales 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 9.6% in 2001.

Divested Health & Functional Food activities

The operating income of $140 million includes the divestment gain of $132 million, after related restructuring charges arising on the divestment of the Health & Functional Food business, and the normal operating income from these activities offset by $18 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 $53 million in 2001 to $115 million in 2002.

5. Net income

The following table sets forth selected income statement data for the periods indicated.

	Year ended December 31,		
	2002	**2001**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Operating income	**5,092**	**4,325**	**18**
Result from associated companies	(7)	83	
Financial income, net	613	284	116
Income before taxes and minority interests	**5,698**	**4,692**	**21**
Taxes	(959)	(844)	14
Income before minority interests	**4,739**	**3,848**	**23**
Minority interests	(14)	(12)	17
Net income	**4,725**	**3,836**	**23**

Result from associated companies

Associated companies are accounted for using the equity method generally where we own between 20% and 50% of the voting shares of such companies. The result from associated companies is mainly derived from our investments in Roche Holding AG and Chiron Corporation.

As of December 31, 2002, we had a 32.7% (2001: 21.3%) interest in Roche voting shares, which represented 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 and amortization arising from allocating the purchase price to tangible and intangible assets and goodwill, resulted in a pre-tax loss of $116 million (2001: $23 million loss).

Our 42.0% interest in Chiron contributed pre-tax income of $107 million (2001: $110 million). Our share of the net income of both Roche and Chiron were based upon analysts' estimates for the full year 2002. Any differences between these estimates and actual results were adjusted in 2003. In 2001, our income statement includes five quarters of results for Chiron, including an estimate of Chiron's fourth quarter results.

Financial income, net

A net financial income of $613 million (2001: $284 million), was generated in a difficult environment due to good currency management and equity strategies. Gross financial income of $738 million (including net income on options and forward contracts and after deducting other financial expense) was $159 million higher than in 2001.

Additionally, interest expense was $194 million (2001: $218 million) and net currency gains were $69 million (up $146 million from 2001). The net currency gain was due to currency gains mainly from Japanese yen positions.

Taxes

Despite increased profits, the tax charge of $959 million increased only $115 million over the year. Taxes as a percentage of income before tax were 16.8% in 2002 compared to 18.0% in 2001.

Net income

Net income as a percentage of total sales increased, from 20.4% in 2001 to 22.6% in 2002.

Exchange Rate Exposure and Risk Management

We transact business in many currencies other than the US dollars. On average in 2003, the US dollar was weaker against the Swiss franc, Japanese yen, euro and British pound than in 2002.

As a result of our foreign currency exposure, exchange rate fluctuations have a significant impact in the form of both translation risk and transaction risk on our income statement. Translation risk is the risk that our 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 US dollars. Transaction risk is the risk that the value of transactions executed in currencies other than the subsidiary's measurement currency may vary according to currency fluctuations.

In 2003, 43% of sales were generated in US dollars, 26% in euro, 4% in Swiss francs, 8% in Japanese yen and 19% in other currencies. In 2002, 43% of our sales were generated in US dollars, 25% in euro, 5% in Swiss francs, 8% in Japanese yen and 19% in other currencies. In 2001, 45% of our sales were generated in US dollars, 23% in euro, 5% in Swiss francs, 8% in Japanese yen and 19% in other currencies.

In 2003, 41% of operating costs were generated in US dollars, 23% in euro, 17% in Swiss francs, 4% in Japanese yen, and 15% in other currencies. In 2002, 41% of our operating costs were generated in US dollars, 22% in euro, 22% in Swiss francs, 4% in Japanese yen, and 11% in other currencies. In 2001, 41% of our operating costs were generated in US dollars, 22% in euro, 21% in Swiss francs, 4% in Japanese yen, and 12% in other currencies.

New Accounting Pronouncements

See note 32(k)(xii) and (xiii) to the consolidated financial statements for a discussion of the effect of new accounting standards.

US Dollar Reporting

We changed the reporting currency of our consolidated financial statements from Swiss francs to US dollars on January 1, 2003. All prior year consolidated financial information has been restated into US dollars.

The move to presenting our consolidated financial data in US dollars reflects the increasing importance of our sales in US dollars and makes our financial information more easily comparable with peer companies in the pharmaceutical industry.

5.B Liquidity and Capital Resources

Cash Flow

The following table sets forth certain information about our cash flow and net liquidity for each of the periods indicated.

	Year ended December 31,		
	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Cash flow from operating activities	6,652	5,229	4,358
Cash flow used for investing activities	(1,298)	(2,865)	(2,772)
Cash flow used for financing activities	(5,764)	(4,041)	(162)
Net effect of currency translation on cash and cash equivalents	258	836	(156)
Change in cash and cash equivalents	**(152)**	**(841)**	**1,268**
Change in short- and long-term marketable securities	869	189	(733)
Change in short- and long-term financial debts	(400)	(402)	(1,414)
Change in net liquidity	**317**	**(1,054)**	**(879)**
Net liquidity at January 1	6,972	8,026	8,905
Net liquidity at December 31	**7,289**	**6,972**	**8,026**

The analysis of our cashflow is divided as follows:

1. Cash Flow from Operating Activities and Free Cash Flow
2. Cash Flow from Investing Activities
3. Cash Flow from Financing Activities
4. Net Liquidity

1. Cash Flow From Operating Activities and Free Cash Flow

In 2003, our primary source of liquidity was cash generated from our operations. The cash flow from operating activities increased by $1.4 billion (27%) from 2002 to $6.7 billion mainly as result of improved working capital management and higher net income. Depreciation, amortization and impairment charges

increased from 2002 by $50 million to $1.4 billion. Current tax payments were $49 million higher than the prior year.

In 2002, cash flow from operating activities increased over 2001 by $0.9 billion (20%) to $5.2 billion mainly as result of higher net income and increased non-cash expenses.

Our free cash flow, excluding the impact of the acquisitions of the Roche stake and Lek, increased 20.6% from $2.5 billion in 2001 to $3.0 billion in 2002, and 23% from $3.0 billion in 2002 to $3.6 billion in 2003.

Our capital expenditure on tangible fixed assets for 2003 totaled $1.3 billion (5.2% of sales), compared to $1.1 billion (5.3% of sales) in 2002 and $0.8 billion in 2001 (4.3% of sales).

This level of capital expenditure reflects the continuing investment in Production as well as Research and Development facilities. We expect to maintain spending at approximately the 2003 percentage of sales levels in 2004 and to fund these expenditures with internally

generated resources.

We present Free Cash Flow as additional information as it is a useful indicator of our ability to operate without reliance on additional borrowing or usage of existing cash. Free Cash Flow is a measure of the net cash generated which is available for debt repayment and investment in strategic opportunities, including strengthening our balance sheet. We use Free Cash Flow in internal comparisons of our Divisions' and Business Units' results. Free Cash Flow of our Divisions and Business Units uses the same definition as that for our Group, however no dividends, tax or financial receipts or payments are included in the Division and Business Unit calculation. Free Cash Flow is not intended to be a substitute measure for cash flow from operating activities (as determined under IFRS or US GAAP).

In 2001, we excluded the purchase of certain product and marketing rights from Free Cash Flow calculations since we considered these transactions to be non-recurring and strategic in nature.

The following table details the components of these increases.

	Year ended December 31,		
	2003	**2002**	**2001**
	($ millions)	**($ millions)**	**($ millions)**
Cash flow from operating activities	**6,652**	**5,229**	**4,358**
Purchase of tangible fixed assets	(1,329)	(1,068)	(801)
Purchase of intangibles assets	(214)	(90)	(580)
Purchase of financial assets	(816)	(725)	(828)
Proceeds from sale of tangible, intangible and financial assets	1,059	979	1,082
Dividends paid to third parties	(1,724)	(1,367)	(1,268)
Acquisition of product and marketing rights			490
Free cash flow	**3,628**	**2,958**	**2,453**

2. Cash Flow From Investing Activities

Our cash outflow due to investing activities was $1.3 billion. $0.4 billion was spent to increase the strategic investment in Roche and for the acquisition of Idenix. Our investment in tangible assets totaled $1.3 billion. The net proceeds from sales of marketable securities was $0.4 billion.

Our net cash outflow from investing activities increased to $2.9 billion in 2002 from $2.8 million in 2001. In 2002, $2.7 billion was spent to increase the strategic investment in Roche and for the acquisition of Lek.

3. Cash Flow From Financing Activities

The cash flow used for financing activities was $5.8 billion. $0.3 billion was spent for the acquisition of treasury shares, $1.7 billion for dividend payments and $3.5 billion for the repayment of equity instruments.

Our net cash outflow from financing activities increased from $0.2 billion in 2001 to $4.1 billion in 2002. The $3.9 billion increase in 2002 as compared to 2001 was mainly due to proceeds we received from the issuance of equity option instruments in 2001. In 2002, $3.3 billion was spent for the acquisition of treasury shares and $1.4 billion for dividend payments while the issue of EUR 1 billion bond and the conversions of the remaining two convertible bonds contributed to a net inflow of $0.6 billion.

In 2003, we repaid $0.3 billion of our financial debts as compared to receipts of $0.6 billion in 2002 and $1.0 billion in 2001.

4. Net Liquidity

Our overall liquidity (cash, cash equivalents and marketable securities including financial derivatives) amounted to $13.3 billion at December 31, 2003. Net liquidity (liquidity less financial debt) at year end was $7.3 billion, $0.3 billion more than the December 31, 2002 level, despite the cash outflow due to financing activities explained above.

Our overall liquidity amounted to $12.5 billion at December 31, 2002, a reduction of $0.6 billion compared to 2001. Net liquidity (liquidity less financial debt) remained high at $7.0 billion despite a reduction of $1 billion from the December 31, 2001 level due to various financing activities.

We present overall liquidity and net liquidity as additional information as they are useful indicators of our ability to meet our financial commitments and to invest in new strategic opportunities, including strengthening our balance sheet. These items should not be interpreted as measures determined under IFRS.

We use marketable securities and derivative financial instruments to manage the volatility of our exposures to market risk in interest rates and liquid investments. Our objective is to reduce, where appropriate, fluctuations in earnings and cash flows. We manage these risks by selling existing assets or entering into transactions and future transactions (in the case of anticipatory hedges) which we expect we will have in the future, based on past experience. We therefore expect that any loss in value for those securities or derivative financial instruments generally would be offset by increases in the value of those hedged transactions.

We use the US dollar as our reporting currency and are therefore exposed to foreign exchange movements primarily in European, Japanese and other Asian and Latin American currencies. We manage the risk associated with currency movements by entering into various contracts to preserve the value of assets, commitments and anticipated transactions. In particular, we enter into forward contracts and foreign currency option contracts to hedge certain anticipated foreign currency revenues in foreign subsidiaries. See "Item 11. Quantitative and Qualitative Disclosures About Market Risk," for additional information.

Share repurchase program

On July 22, 2002, we initiated our third share buy-back program to repurchase shares on the SWX Swiss Exchange for up to a total of CHF 4 billion. During 2003, 24.3 million shares were repurchased via a second trading line for a total amount of $939 million (2002: 24.6 million shares for a total amount of $1.0 billion). In 2003, the Group's share capital was reduced by 22.7 million shares relating to shares bought on the second trading line in 2002. Proposals will be made at the forthcoming Annual General Meeting to be held on February 24, 2004 to reduce the share capital by a further 24.3 million shares relating to the shares bought on the second trading line in 2003, to initiate a fourth share repurchase program of up to CHF 3 billion, and to reduce our share capital by the amounts repurchased as a result of the fourth repurchase program in each year, starting in 2005.

During the year to December 31, 2003 an additional 17.1 million shares, net, were also sold on the first trading line for a total of $666 million (2002: 55.4 million shares, net were bought for $2.4 billion).

In February 2001, our Board of Directors approved our second share repurchase program for an amount of up to CHF 4 billion by means of a second trading line established on the SWX Swiss Exchange. As of December 31, 2001, we had repurchased 59 million shares for a total of $2.6 billion. An additional 1.9 million shares were then purchased during January 2002 to complete this program. The average price for the shares we acquired under this program was CHF 66. On March 21, 2002 the Annual General Meeting cancelled 61.1 million shares with a nominal value of $22 million.

On August 27, 1999, we announced our first share repurchase program, in which we would purchase our shares in the open market for an amount of up to CHF 4 billion. That repurchase program was completed in January 2001. The program was wholly financed with our surplus liquidity. The acquired shares were kept as treasury shares.

At December 31, 2003, our holding of treasury shares (excluding the amount that we will propose to be cancelled at the February 2004 Annual General Meeting) amounted to 309 million shares or 11% of the total number of issued shares.

Other equity instruments

During December 2001, through indirectly held affiliates, we sold a total of 55 million ten-year call options (Low Exercise Price Options "LEPOs") on our shares, with an exercise price of CHF 0.01, for EUR 2.2 billion in proceeds (EUR 40 per LEPO). We accounted for the LEPOs as an increase in share premium at fair value less related issuance costs. Following changes in US GAAP and expected changes in IFRS, on June 26, 2003 we redeemed these equity instruments in advance of their exercise date.

We had previously also sold a total of 55 million nine and ten-year put options on our shares to a third party with an exercise price of EUR 51 receiving EUR 0.6 billion in proceeds (EUR 11 per put option). We accounted for the option premium associated with the put options as an increase in share premium less related issuance costs. Following changes in US GAAP and expected changes in IFRS, on June 26, 2003 we redeemed these equity instruments in advance of their exercise date.

Convertible Bonds

A 2% Convertible Bond was issued on October 6, 1995 by our affiliate, Sandoz Capital BVI Ltd. (now Novartis Capital Ltd., "Novartis Capital"). This Bond was guaranteed by Sandoz AG and due in 2002 in the amount of $750 million. The bonds were convertible into Novartis shares up to and including September 30, 2002. In 2002, except for Bonds with a value of $120,000, all of these Bonds were converted into 27,555,462 Novartis shares. The remaining $120,000 in Bonds were repaid.

A 1 1/4% Convertible Bond was issued on October 23, 1995 by Novartis Capital. This Bond was guaranteed by Sandoz AG and due in 2002 in the amount of CHF 750 million. In 2002, all of these Bonds were converted into 766,200 Novartis shares and 19,155 shares of Syngenta AG.

Straight Bond

On November 14, 2002, our affiliate, Novartis Securities Investment Ltd, Bermuda, issued a 3.75% bond, guaranteed by Novartis AG and due in 2007, in the amount of EUR 1 billion.

On October 17, 2001, our affiliate, Novartis Securities Investment Ltd., Bermuda, issued a 4% bond, guaranteed by Novartis AG and due in 2006, in the amount of EUR 900 million.

ADS Direct Purchase Plan and Dividend Reinvestment Plan

The Direct Purchase and Dividend Reinvestment Plan for our ADSs, which are listed on the New York Stock Exchange, is a no-fee plan open to new investors as well as existing ADS shareholders in the

US. This plan features no enrollment, purchase or dividend reinvestment fees. An initial investment of $500 is required, or the deposit of a minimum of 10 Novartis ADSs into a plan account. Transaction fees are applied when ADSs are sold. To date, there have been no new issuances of Novartis shares or ADSs under this plan and no effect on our share capital or balance sheet.

5.C Research & Development, Patents and Licenses

Our Research & Development spending totaled $3.8 billion, $2.8 billion and $2.5 billion for the years 2003, 2002 and 2001, respectively. Each of our Divisions and Business Units has its own Research & Development and patents policies. For a description of those research and development and patents policies, see "Item 4. Information on the Company 4.B Business Overview."

5.D Trend Information

Please see " 5.A Operating Results" and "Item 4. Information on the Company 4.B. Business Overview" for trend information.

5.E Off-Balance Sheet Arrangements

We have no unconsolidated special purpose financing or partnership entities that are likely to create material contingent obligations. See also note 27 of the consolidated financial statements.

5.F Aggregate Contractual Obligations

We have long-term research agreements with various institutions which require us to fund various research projects in the future. As of December 31, 2003, the aggregate total amount of payments, excluding potential milestones, which may be required under these agreements was $811 million. We expect to fund these long-term research agreements with internally generated resources.

As of December 31, 2003, our total financial debt was $6.0 billion, as compared with $5.6 billion as of December 31, 2002, and $5.2 billion as of December 31, 2001. The increase from 2002 to 2003 is due to currency translation effect on our euro denominated bonds.

The increase of $0.4 billion of debt at December 31, 2002 compared to December 31, 2001 was primarily due to the issue of a EUR 1.0 billion straight bond due 2007 partially offset by the conversion of $0.7 billion of convertible debt and reduction in short-term debt. Our year end debt/equity ratio remained stable at 0.20:1 in 2003 from 0.20:1 in 2002 and 0.21:1 in 2001.

We had $3 billion in non-convertible bonds at December 31, 2003, up from $2.6 billion at December 31, 2002 and $1.4 billion as of December 31, 2001. The increase from 2002 to 2003 has been due to currency translation effect on our euro denominated bonds. The increase from 2001 to 2002 was primarily due to the issuance on November 14, 2002 by our Bermuda affiliate, Novartis Securities Investment Ltd, of EUR 1 billion of 3.75% guaranteed notes, due 2007, guaranteed by Novartis AG.

For details on the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements.

As of December 31, 2003, we had short-term debt (excluding the current portion of long-term debt) of $2.7 billion as compared with $2.7 billion as of December 31, 2002, and $2.9 billion as of December 31, 2001. This short-term debt consisted mainly of $0.6 billion (2002: $0.9 billion; 2001: $0.6 billion) in commercial paper; and other bank and financial debt, including interest bearing employee accounts, of $1.6 billion (2002: $1.5 billion; 2001: $1.7 billion).

We are in compliance with all covenants or other requirements set forth in our financing agreements. We do not have any rating downgrade triggers that would accelerate maturity of our debt. For details of

the maturity profile of debt, currency and interest rate structure, see note 18 to the consolidated financial statements. Our debt continues to be rated by Standard & Poor's and Moody's respectively as AAA and Aaa for long-term maturities and A1+ and P1 for short-term debt. We consider our working capital to be sufficient for our present requirements.

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**1 3 years**	**3 5 years**	**After 5 years**
	($ millions)	**($ millions)**	**($ millions)**	**($ millions)**	**($ millions)**
Long-Term Debt	3,114	37	1,741	1,297	39
Operating Leases	928	211	291	156	270
Finance Leases	122	8	114		
Research & Development Commitments (excluding potential milestone payments)[1]	811	317	456	33	5
Total Contractual Cash Obligations	**4,975**	**573**	**2,602**	**1,486**	**314**

(1) The possible impact of potential milestone payments are explained in the following section, "Contingencies".

Contingencies

In connection with our original investment in Chiron, we agreed to:

purchase up to $500 million of new Chiron equity at fair value, at Chiron's request (a "Put"). To date, Chiron has made no such request.

guarantee up to $703 million of Chiron debt. We are not obligated to make any payments under this guarantee unless Chiron defaults on the debt. If Chiron uses this guarantee in excess of $403 million, then our Put obligation is reduced by the excess amount.

The outstanding equity Put and guarantee expire no later than 2011.

We have entered into long-term research agreements with various institutions. These agreements may require us to make up to $729 million in potential milestone and other contingent payments. Of this amount, we may be required to pay up to $553 million within the next 5 years.

For other contingencies, see "Item 4. Information on the Company 4.D Property, Plants and Equipment Environmental Matters" and "Item 8. Financial Information 8.A Consolidated Statements and Other Financial Information 8.A.7 Legal Proceedings."

Item 6. Directors, Senior Management and Employees

6.A Directors and Senior Management

We are fully committed to good corporate governance. Our principles and rules on corporate governance are laid down in our Articles of Incorporation, the Regulations of the Board and the Charters of the Board Committees. 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.

Our Board of Directors is elected by our shareholders and holds the ultimate decision-making authority for Novartis AG, except for those matters reserved by law or by our Articles of Incorporation to the shareholders. The Board is comprised of 14 persons. The average age of our Directors is 61 and their

average tenure is 6 years. Our Chairman and Chief Executive Officer, Daniel Vasella, MD, is our only executive Director. It is the view of the Board that this dual role ensures effective leadership and excellent communication between the shareholders, the Board and Management.

Alexandre F. Jetzer was a member of the Executive Committee until 1999 and supports Novartis' Government Relations under a consultancy agreement. On the basis of the independence criteria listed in the appendix to the Regulations of the Board and Committee Charters effective as of April 15, 2003, the Board has decided that with the exception of Dr. Vasella, Mr. Jetzer and, as set forth below, Prof. Srikant Datar, PhD, all Directors are independent and have no material relationship with Novartis AG or other companies of the Group outside of their role as a Director. No Director sits on the board of directors of other listed companies with which any Group company conducts a material amount of business. Our independent Directors meet separately, without the presence of the Directors who are not independent, twice each year.

We have for the last seven years, among other institutions, engaged Harvard Business School, the employer of Prof. Datar, to train our executives in financial and business matters. The compensation we paid for these programs is not material in comparison with the total revenues of Harvard Business School and, therefore, does not constitute a "material relationship." Before his nomination as a Director, Prof. Datar had given up management responsibilities for these programs. Since his nomination as Director in 2003, Prof. Datar has not been separately compensated for these programs. New rules which were published by the New York Stock Exchange (NYSE) in 2003, and which will become effective in November 2004, will require us to look back three years in order to determine whether a Director is independent. For this reason, when the new NYSE rule takes effect, Prof. Datar's professional engagement for Novartis AG prior to his nomination as Director will cause him to no longer be considered an "independent" Director as of that time. As a consequence, in December 2003, Prof. Datar stepped down from the Audit and Compliance Committee, which requires all members to be independent.

In his capacity as a Director, Prof. Rolf M. 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).

The primary functions of the Board, as defined in the Swiss Code of Obligations and in our Articles of Incorporation, are:

strategic direction and management;

accounting matters, financial control and financial planning;

appointing and dismissing of members of the Executive Committee and other key executives;

overall supervision of business operations; and

setting out the motions to be presented to the General Meeting, including approval of financial statements.

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

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

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

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

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

Dr. Vasella has been elected by the Board as our Chairman and also to serve Novartis AG as Chief Executive Officer. The Board has appointed Prof. Helmut Sihler, JD, PhD as Vice Chairman and Lead Director. Hans-Jörg Rudloff has been elected Vice Chairman.

During 2003, the Board met 7 times. Detailed information on each Director's attendance at full Board and Board Committee meetings is provided in the table below:

	Full Board	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Number of meetings in 2003	7	8	3	8	2
Daniel Vasella, MD	7[1]	8[1]			
Prof. Helmut Sihler, JD, PhD	7	8	3[1]	8[1]	2
Hans-Jörg Rudloff	7	8	3		2
Dr. h.c. Birgit Breuel	7			7	
Prof. Peter Burckhardt, MD	7				
Prof. Srikant Datar, PhD.[2]	5			5	
Walter G. Frehner	7			7	
William W. George	7	8	3		2[1]
Alexandre F. Jetzer	7				
Pierre Landolt	7				
Prof. Ulrich Lehner, PhD	7			7	
Heini Lippuner	7	8			
Dr.-Ing. Wendelin Wiedeking[2]	4				

	Full Board	Chairman's Committee	Compensation Committee	Audit and Compliance Committee	Corporate Governance Committee
Prof. Rolf M. Zinkernagel, MD	7				2

(1) Chair.

(2) Since March 4, 2003.

Directors

Dr. h.c. Daniel Vasella, MD (Age 50). Chairman of the Board of Directors and Chairman of the Chairman's Committee (since 1999), Chief Executive Officer and Head of the Group Executive Committee (since 1996). His current term as Chairman expires in 2004. 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 US 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 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., US. 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. In 2002, Dr. Vasella was awarded an honorary doctorate by the University of Basel.

Prof. Helmut Sihler, JD, PhD (Age 73). Vice Chairman of our Board (since 1996), Lead Director and a member of the Chairman's Committee and Compensation Committee (since 1999), and Chairman of the Audit and Compliance Committee and a member of the Corporate Governance Committee (since 2001). His current term expires in 2004. Helmut Sihler studied philology and law in Graz, Austria and Burlington, Vermont and graduated with a PhD in philology and a JD. 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 (Age 63). Vice Chairman of our Board of Directors (since 1996), a member of the Chairman's Committee and Compensation Committee (since 1999), and a member of the Corporate Governance Committee (since 2001). His current term expires in 2004. Hans-Joerg Rudloff studied economics at the University of Bern and graduated in 1965. He joined Credit Suisse in Geneva and moved to New York in 1968 to join the investment banking firm of Kidder Peabody Inc. He was in charge of the Swiss operation and was elected Chairman of Kidder Peabody International and a member of the Board of Kidder Peabody Inc. in 1978. In 1980 he joined Credit Suisse First Boston and was elected Vice Chairman in 1983 and Chairman and CEO in 1989. From 1986 to 1990 Hans-Joerg Rudloff was also a member of the Executive Board of Credit Suisse in Zurich in charge of all securities and capital market departments. 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-Joerg 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-Joerg 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 2002 he has been a member of the Corporate Governance Committee. Hans-Joerg 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 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 (Age 66). Director (since 1996), and a member of the Audit and Compliance Committee (since 1999). Her current term expires in 2005. Birgit Breuel studied politics at the Universities of Hamburg, Oxford and Geneva. She was Minister of Economy and

Transport (1978-1986) and Minister of Finance (1986-1990) of 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 (Age 65). Director (since 1996). His current term expires in 2005. 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. Peter Burckhardt 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. In addition 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 treasurer of 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 was board member of numerous scientific societies including the Swiss Societies of Nutrition, Clinical Chemistry, Endocrinology, Bone and Mineral Research, and the Committee for Endocrinology of the European Community. Since 1990, he has been the organizer and chairman of the International Symposia on Nutrition and Osteoporosis.

Prof. Srikant Datar, PhD (Age 50). Director (since 2003), and a member of the Audit and Compliance Committee (during 2003). His current term expires in 2006. In 1973 Professor Srikant Datar graduated with distinction in mathematics and economics at the University of Bombay. After his studies he worked as Accountant, Planner as well as Visiting Professor and Professor at the Universities of Carnegie Mellon, Stanford and Harvard. He is a Chartered Accountant and holds two masters degrees and a PhD from Stanford University. Srikant Datar holds the Arthur Lowes Dickinson Professorship at Harvard University. He is currently the Senior Associate Dean for Executive Education at the Harvard Business School. His research interests are in the areas of cost management, measurement of productivity, new product development, time-based competition, incentives and performance evaluation. He is the author of many scientific publications and has received several academic awards and honors. Srikant Datar has advised and worked with numerous renowned firms such as Du Pont, General Motors and Mellon Bank in research, development and training. He is also a member of the Board of Voyan Technology Inc., Santa Clara, California, and of Harvard Business School Interactive, Boston, Massachusetts.

Walter G. Frehner (Age 70). Director (since 1996), and a member of the Audit and Compliance Committee (since 2001). His current term expires in 2004. After completing commercial school and an apprenticeship at the Bernese Cantonal Bank in Interlaken, Walter G. 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 G. 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 Bâloise Holding AG, Basel, Switzerland, where he is also the Vice Chairman.

William W. George (Age 61). Director (since May 1999), and a member of the Chairman's Committee and Chairman of the Corporate Governance Committee (since 2001). His current term expires in 2006. 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 Senior Lecturer at Harvard Business School, having served as Executive-in-Residence at Yale School of Management and Professor of Leadership and Governance at IMD International in Lausanne, Switzerland. In addition, he is a member

of the Board of Directors of Harvard Business School, National Association of Corporate Directors, Carnegie Endowment for International Peace and Minneapolis Institute of Arts.

Alexandre F. Jetzer (Age 62). Director (since 1996). His current term expires in 2005. Alexandre F. 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 F. Jetzer joined Sandoz in 1980. In 1981 he became Member of its Group Executive Committee in the capacity of Chief Financial Officer (CFO) and, as of 1990, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Vice Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation in East Hanover, New Jersey. 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 F. 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 (Age 56). Director (since 1996). His current term expires in 2005. Pierre Landolt graduated with a Bachelor of Law degree from the University of Paris-Assas. 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, US, 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 Landolt Kapital SA, Pully, Switzerland, and 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, Vaucher Manufacture Fleurier SA., Fleurier, Switzerland (Chairman), and as Vice Chairman of the Boards of Directors of Parmigiani, Mesure et Art du Temps S.A., Fleurier, Switzerland, and the Fondation du Montreux Jazz Festival, Montreux, Switzerland.

Prof. Ulrich Lehner, PhD (Age 57). Director and member of the Audit and Compliance Committee (since 2002). His current term expires in 2005. 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 KGaA 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 a member of the Audit and Compliance Committee. He also serves as a member of the Board of Directors of Dresdner Bank, Luxembourg, Luxembourg, of Ecolab Inc., St. Paul, US, and E.ON AG, Düsseldorf, Germany. 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 (Age 70). Director (since 1996) and member of the Chairman's Committee (since 1999). His current term expires in 2005. 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 Buehler 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.

Dr.-Ing. Wendelin Wiedeking (Age 51). Director (since 2003). His current term expires in 2006. Born in Ahlen, Germany, Wendelin Wiedeking studied mechanical engineering and worked as a scientific assistant in the Machine Tool Laboratory of the Rhine-Westphalian College of Advanced Technology in Aachen. His professional career began in 1983 as Director's Assistant in the Production and Materials Management area of Dr.-Ing. h.c. F. Porsche AG in Stuttgart- Zuffenhausen. In 1988 he moved to the Glyco Metall-Werke KG in Wiesbaden as Division Manager, where he advanced by 1990 to the position of Chief Executive and Chairman of the Board of Management of Glyco AG. In 1991 he returned to Porsche AG as Production Director. A year later, the Supervisory Board appointed him spokesman of the Executive Board (CEO), and in 1993 its Chairman. He is also a member of the Board of Directors of Deutsche Telekom AG, Germany, and of Eagle Picher Incorporated, Phoenix, Arizona.

Prof. Rolf M. Zinkernagel, MD (Age 59). Director (since 1999) and member of the Corporate Governance Committee (since 2001). His current term expires in 2006. Rolf M. 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 M. 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 M. 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 M. Zinkernagel was 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 until April 2003; Bioxell, Milano, Italy; Esbatech, Zurich, Switzerland; Novimmune, Geneva, Switzerland, and Mann-Kind, Sylmar CA, US Rolf M. Zinkernagel is also a Science Consultant to: GenPat77, Berlin/Munich, Germany; Aponetics AG, Witterswil, Switzerland; Solis Therapeutics, Palo Alto, US, and Ganymed, Mainz, Germany.

Executive Officers and Senior Management

Dr. h.c. Daniel Vasella, MD (Age 50). Chairman of the Board of Directors and Chairman of the Chairman's Committee (since 1999), Chief Executive Officer and Head of the Group Executive Committee (since 1996). See " Directors."

Urs Baerlocher, JD (Age 61). Head of Legal and General Affairs and a member of the Group Executive Committee (since 1999). 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 Corporate Intellectual Property, Corporate Health, Safety & Environment and Corporate Security.

Raymund Breu, PhD (Age 58). Chief Financial Officer and a member of the Group Executive Committee (since 1996). 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 Swiss Re, Chiron, US, and of the SWX Swiss Exchange and of its admission panel and its takeover commission.

Juergen Brokatzky-Geiger, PhD (Age 51). Head of Human Resources and Permanent Attendee to the Executive Committee. Juergen Brokatzky-Geiger graduated with a PhD in Chemistry from the University of Freiburg, Germany, in 1982. He joined Ciba-Geigy in 1983 as a Laboratory Head in the Pharmaceutical Division. After a job rotation in Summit, NJ, from 1987 to 1988 he held a number of positions of increasing responsibility, including Group Leader of Processes in R&D, Head of Processes in R&D and Head of Process Development and Pilot Plant Operations. During the merger of Ciba-Geigy and Sandoz in 1996, Juergen Brokatzky-Geiger was appointed Integration Officer of Technical Operations. Thereafter, he became the Head of Chemical and Analytical Development and, from 1999 until August 2003, he served as the Global Head of Technical R&D. Juergen Brokatzky-Geiger was appointed to his present position as Head of Human Resources on September 1, 2003.

Paul Choffat, JD (Age 54). Head of Novartis Consumer Health and member of the Group Executive Committee (since 2002). 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 January 2002 as Head of Novartis Consumer Health and member of the Group Executive Committee.

Thomas Ebeling (Age 44). Head of Novartis Pharma (since 2000) and member of the Group Executive Committee (since 1998). 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 Nutrition, he became CEO of Novartis Consumer Health worldwide, and then Chief Operating Officer of Novartis Pharmaceuticals, before attaining his present position in 2000.

Prof. Mark C. Fishman, MD (Age 53). Head of Pharmaceuticals Research and a member of the Group Executive Committee (since 2002). Mark C. 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 National Institute of Health (NIH) and Wellcome 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 C. 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 in Boston.

Steven Kelmar (Age 50). Head of Public Affairs and Communications and Permanent Attendee to the Executive Committee. Steven Kelmar graduated with a Bachelor of Arts in Public Administration and Economics from Pennsylvania State University and spent 14 years (1979-1993) in public service in several executive positions. He was Chief of Staff to two Members of the US Congress and also worked in several legislative capacities for Members of the US Senate and the House of Representatives before his appointment by President Bush in 1990 to the position of Assistant Secretary for Legislation in the US Department of Health and Human Services. In this capacity, he served as one of the federal government's chief policy makers during a time of major national re-examination of healthcare delivery systems. He managed the activities of the federal government's largest legislative policy offices and served as one of the principal members of the department's budget council which sets priorities for various federal agencies such as: HCFA, FDA, Social Security and the Public Health Service. In 1993, he joined Strategic Management Association of Alexandria Viginia, a firm specializing in healthcare consulting, where he was Vice President, Governmental Affairs. In 1997, he moved to Medtronic Inc., to become Senior Vice President of External Relations, overseeing Corporate Public Relations, Internal Communications, Branding, Government Affairs, the Corporate Coverage and Reimbursement Group, the Corporate E-business Center and the Medtronic Foundation. His External Relations responsibility also included all of Medronic's specific strategic planning initiatives. In February 2003, Steven Kelmar joined Novartis as Head of Public Affairs and Communications.

Norman C. Walker (Age 51). Resigned as Head of Human Resources and a member of the Group Executive Committee during 2003, a position he had held since 1998.

Business Unit[1] Heads

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
	Oncology (since 2000)	1989		

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
David Epstein, BSc, MBA American, 42			Chief Operating Officer and member of the Executive Committee of Novartis Pharmaceuticals Corporation (US)	Bachelor of Science, Pharmacy (Rutgers University) and MBA (Columbia University)
Anthony Rosenberg BSc, MSc British, 50	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)
Flemming Ørnskov Danish, 45	Ophthalmics (since 2003)	2001	Head of Cardiovascular Products Group, Novartis Pharmaceuticals Corporation (US)	Bachelor of Medicine (University of Copenhagen, Denmark), MBA (INSEAD) and Master Public Health (Harvard University)
Peter Hewes BA Econ. British, 56	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, 48	Sandoz (since 2001)	1982	Country Head of Novartis Austria, Head of Novartis Austria Pharma Operations	MBA (Innsbruck University, Austria)
Larry Allgaier BSc American, 45	OTC (since 2003)	2003	General Manager, North American Baby Care for Proctor & Gamble	Bachelor of Science, Chemical Engineering (Christian Brothers University, Tennessee)
George Gunn MSc British, 53	Animal Health (since 2004)	2003	Head of Animal Health US and Region North America	Bachelor of Veterinary Medicine and Surgery (Royal School of Veterinary Studies/University of Edinburgh), MSc in Veterinary Medicine (University of Edinburgh)
Michel Gardet MA Business French, 46	Medical Nutrition (since 2002)	1991	General Manager of Novartis Consumer Health Iberia; Head of Health and Functional Nutrition Novartis	MA (Ecole Supérieure de Commerce de Paris)
Kurt T. Schmidt BSc, MBA American, 46	Infant & Baby (since 2004)	2002	Head of Animal Health Business Unit	Bachelor of Science (United States Naval Academy, Annapolis) and MBA (University of Chicago)
Joseph T. Mallof BSc, MBA American, 52	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 2003 or early in 2004, the following Executives retired from or terminated their employment with the Novartis Group: Norman Walker (Executive Committee Member), Luzi Von Bidder (Business Unit Head), Michel Orsinger (Business Unit Head) and Frank Palantoni (Business Unit Head). Kurt Schmidt, the former Business Unit Head of Animal Health took on the position of Business Unit Head of Infant & Baby.

None of the above directors or senior management have any family relationship with any other director or member of our senior management. Executive officers are elected by the Board of the affiliate which employs them, typically for an indefinite term of office. They may be removed by the Board at any time. None of the above directors or senior management were appointed pursuant to an arrangement or understanding between such officer or director and any third party.

6.B Compensation

Non-Executive Directors Compensation

The Compensation Committee of our Board of Directors advises the Board on the compensation of our 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. Directors can choose to receive the annual retainer in cash or shares, or in a combination of cash and shares. Since January 1, 2003, we no longer offer share options to Directors, or grant shares to Directors in acknowledgment of business performance. Directors are reimbursed for travel and other necessary business expenses incurred in the performance of their services.

2003 Non-Executive Directors' Compensation

	Annual Cash Compensation ($)[1]	Shares (number)
Dr. h.c. Daniel Vasella, MD Chairman and CEO Chairman's Committee (Chair)	(please refer to the table on page 126)	
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)	727,566	
Hans-Jörg Rudloff Vice Chairman Chairman's Committee (Member) Compensation Committee (Member) Corporate Governance Committee (Member)	18,795	11,874
Dr. h.c. Birgit Breuel Audit and Compliance Committee (Member)	336,402	
Prof. Peter Burckhardt, MD	99,145	4,391
Prof. Srikant Datar, PhD[2] Audit and Compliance Committee (Member during 2003)	199,634	3,302
Walter G. Frehner Audit and Compliance Committee (Member)	336,402	
William W. George Chairman's Committee (Member) Compensation Committee (Member) Corporate Governance Committee (Chair)	246,060	4,069
Alexandre F. Jetzer[3]	8,673	6,756
Pierre Landolt	79,707	4,965
Prof. Ulrich Lehner, PhD Audit and Compliance Committee (Member)	338,073	

	Annual Cash Compensation ($)[1]	Shares (number)
Heini Lippuner		
Chairman's Committee (Member)	375,519	
Dr.-Ing. Wendelin Wiedeking[4]	167,498	2,534
Prof. Rolf M. Zinkernagel, MD[5]		
Corporate Governance Committee (Member)	210,647	7,738
Total	**3,144,121**	**45,629**

(1) Amounts have been converted from CHF to US Dollar using the 2003 average exchange rate of CHF 1.35/US Dollar.

(2) Prof. Srikant Datar, PhD, Professor for Accounting and Senior Associate Dean of the Harvard Business School was elected to the Board at our Annual General Meeting on March 4, 2003. Prof. Datar stepped down from the Audit and Compliance Committee as of December 31, 2003.

(3) In addition, Mr. Jetzer was paid $129,456 for other consulting services.

(4) Dr.-Ing. Wendelin Wiedeking, CEO of Porsche AG was elected to the Board at our Annual General Meeting on March 4, 2003.

(5) Includes $185,705 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

In December 2003, the Board of Directors adopted a share ownership guideline, under which non-executive Directors are required to own at least 5,000 Novartis shares within three years after joining the Board. The total number of Novartis shares owned as of December 31, 2003 by the non-executive Directors and persons closely linked to them was 297,040. The phrase "persons closely linked to them" means (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, 2003, the individual ownership of Novartis shares and options by the non-executive Directors (including persons closely linked to them) was as follows:

Beneficial Owner	Number of shares owned directly or indirectly
Dr. h.c. Daniel Vasella, MD (please refer to the table on page 127)	
Prof. Helmut Sihler, JD, PhD	34,304
Hans-Jörg Rudloff	97,954
Dr. h.c. Birgit Breuel	4,160
Prof. Peter Burckhardt, MD	10,972
Prof. Srikant Datar, PhD	3,302
Walter G. Frehner	13,420
William W. George	35,000

Beneficial Owner	Number of shares owned directly or indirectly
Alexandre F. Jetzer	54,876
Pierre Landolt[1]	200
Prof. Ulrich Lehner, PhD	120
Heini Lippuner	26,060
Dr.-Ing. Wendelin Wiedeking	3,534
Prof. Rolf M. Zinkernagel, MD	13,138
Total	**297,040**

(1) Mr. Landolt is also the Chairman of the Board of Directors of Emasan AG. See "Item 7. Major Shareholders and Related Party Transactions 7.A Major Shareholders."

As of the same date, the non-executive Directors held a total of 365,421 Novartis share options. The number of share options granted and the exercise prices 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)	Conversion Rate	Exercise Price (CHF)	Term life (years)
2002	125,541	1:1	62.0	9
2001	90,480	1:1	70.0	9
2001	10,000	1:1	62.6	10
2000	92,200	1:1	51.3	9
1999	17,200	1:1	68.4	9

Compensation for former Directors and Executives

In 2003, a total amount of $140,824 was paid to four former members of the Board and $2,350,630 to three former Executives.

Report of the Compensation Committee

Executive Compensation Policy

Our compensation programs are designed to attract, retain and motivate the high caliber executives, managers and associates who are critical to the success of the Group. 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, we intend that our programs 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 executives, 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. In addition, to further strengthen our ownership philosophy, in 2003, the Board of Directors established share ownership guidelines under which the Executives are required to own a multiple of their base salary in our shares.

Compensation Programs Descriptions

Total Compensation

The total compensation package for each of our executives 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 2003 salaries of the Executive Committee members are shown in the "Salary" column of the 2003 Summary Compensation Table on page 126.

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 (through 2002), executives and other selected employees of Group companies 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 plan participants. They allow 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, and have an exchange ratio of 1:1.

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

Introduced in 2001, the Novartis US American Depositary Shares (ADS) Incentive Plan grants options to US-based Directors (through 2002), officers and other selected employees. This plan replaces a prior Share Appreciation Rights Plan. Its terms and conditions are substantially equivalent to the Novartis Share Option Plan.

In order to further align the Novartis Share Option Plan and the US ADS Incentive Plan, as of 2004, the vesting period for the Novartis Share Option Plan has been changed to a three-year vesting period, and we will introduce tradable stock options in ADSs in the US.

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 pre-determined 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, participants are eligible to receive an increasing amount of Novartis shares, up to the maximum cap.

(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.

Generally, no matching shares will be granted if an employee voluntarily leaves the Group prior to the expiration of the blocking period.

(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. If a participant voluntarily leaves the Group, then the participant generally will forfeit shares which had not already vested.

Employee Benefits

Employee benefits offered to executives are designed to be competitive and to provide a "safety-net" of protection 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 the Group.

Evaluation of the Executive Committee Members' Performance

The Compensation Committee and the Board of Directors meet 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 2002 and the base salaries for 2003 were discussed and approved at the meetings of the Compensation Committee held in January 2003.

The decisions on compensation of Executive Committee members were mainly based on individual performance evaluations, and also took into account current market conditions. In 2003, 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.

Summary

The Compensation Committee believes that the compensation practices and compensation philosophy of Novartis align executive and shareholder interests. We believe that the actions taken over the past year have allowed the Group to attract, retain and motivate the key talent the Group needs to continue to compete and provide a strong return to shareholders.

The Compensation Committee of the Board of Directors

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

Executive Compensation

In 2003, there were a total of 20 Executive Committee members, Permanent Attendees to the Executive Committee and Business Unit Heads ("Executives"), including those who retired or terminated their employment in 2003. In total, we paid the Executives $10,781,000 in salaries and $4,025,000 in cash bonuses. We granted 3,252,937 share options and 487,853 shares to the Executives during 2003. We also set aside an additional $1,089,000 for the Executives' pension, retirement and similar benefits. The

compensation amounts described in the paragraph represent all payments made to the Executives in 2003. However, the cash bonuses and long-term compensation paid to the Executives were based on 2002 business performance.

The following summary compensation table provides details on the 2003 compensation of the Swiss-based Executive Committee members.

2003 Summary Compensation Table

	Annual Compensation		Long-Term Compensation				
Name and Principal Position	**Salary ($)**	**Cash Bonus ($)**	**Restricted Share Awards (number)[1]**	**Unrestricted Share Awards (number)[2]**	**Share Options (number)[3]**	**All Other Compensation ($)[4]**	**Total Compensation ($)[5]**
Dr. h.c. Daniel Vasella, MD[6] Chairman & CEO	2,228,463		122,825	122,826	1,399,254	122,298	14,431,040
Urs Baerlocher, JD[6] Head of Legal & General Affairs	545,973		30,389	10,134	153,918	122,083	2,053,948
Raymund Breu, PhD[6] Chief Financial Officer	699,490		23,030	13,818	419,777	117,804	3,104,301
Paul Choffat, JD[6] Head of Consumer Health	557,116	250,702	6,909	11,516	125,933	120,515	1,995,627
Thomas Ebeling[6] Head of Pharmaceuticals	742,821	854,244	10,000	15,354	429,105	521,015	4,538,453

	Annual Compensation		Long-Term Compensation				
Prof. Mark C. Fishman Head of Pharmaceuticals Research			5,745	6,023	133,648	34,781	2,374,579
Norman C. Walker[6][7] Head of Human Resources	297,128 850,000	311,985		9,213	70,523	101,252	1,303,421

(1) The Restricted Share Awards include shares granted under the Leveraged Share Savings Plan.

(2) The Unrestricted Share Awards include shares granted under the Long-Term Performance Plan.

(3) The share options granted provide the right to purchase one share per option. Share options granted under the Novartis Share Option Plan have a closing price at grant of CHF 48.85 per share and an exercise price of CHF 49.00 per share. The options have a cliff-vesting period of two years after the date of grant and will expire on February 3, 2012. The tradable share options have a tax value of CHF 4.94 per option, calculated based on the Black-Scholes Method. Share options granted under the US ADS Incentive Plan have a closing price at grant and an exercise price of $36.31 per share. The options have a cliff-vesting period of three years after the date of grant and will expire on February 1, 2013. The non-tradable share options have a value of $7.95 per option, calculated based on the Black-Scholes Method.

(4) Amounts include among others, payments made by Novartis to the Management Pension Fund, a defined contribution plan.

(5) The total compensation amounts have been calculated using the taxable value or Black-Scholes Value of the shares and share options granted. All amounts have been converted into US dollars using 2003 average rates (CHF 1.35/US$).

(6) Compensation is paid in CHF.

(7) Norman C. Walker resigned his position as of August 31, 2003. Compensation shown includes payments made until then.

Distribution of Share Options Granted to Employees

Under the Novartis Share Option Plan and the Novartis US ADS Incentive Plan described above, in 2003 we granted a total of 29.8 million share options, with an exchange ratio of 1:1, to 8,028 participants. 11% of the overall number of share options were granted to the Executives.

As of December 31, 2003, a total of 61.6 million share and ADS options were outstanding, providing holders the right to an equal number of shares, which amount corresponds to 2.2% of our nominal outstanding share capital.

Ownership of Novartis Shares and Share Options by the Executives

The total number of Novartis shares owned as of December 31, 2003 by the Executives and persons closely linked to them was 940,117. The phrase "persons closely linked to them" means (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 Executive owned 1% or more of our outstanding shares.

As of December 31, 2003, the individual ownership of Novartis shares by the Executive Committee members (including persons closely linked to them) was as follows:

Beneficial Owner	Number of shares owned directly or indirectly
Dr. h.c. Daniel Vasella, MD	401,469

Beneficial Owner	Number of shares owned directly or indirectly
Urs Bärlocher, JD	129,536
Raymund Breu, PhD	189,496
Paul Choffat, JD	7,659
Thomas Ebeling	54,522
Prof. Mark C. Fishman	5,745
Total	**788,427**

As of December 31, 2003, the Executives held a total of 6,361,294 Novartis share options. The number of share options granted and the exercise prices were 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)[1]	Conversion Rate	Exercise Price (CHF)	Term life (years)
2003	3,182,414	1:1	49.0	9
2002	2,124,250	1:1	62.0	9
2001	490,070	1:1	70.0	9
2000	430,200	1:1	51.3	9
1999	101,000	1:1	68.4	9

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

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 2003 Novartis contributed CHF 11,700 for each of the Swiss-based Executive Committee members.

	Years of Service					
Base Salary (CHF)	**15**	**20**	**25**	**30**	**35**	**40**
100,000	17,076	22,764	28,464	34,152	39,840	45,528
140,000	26,076	34,764	43,464	52,152	60,840	69,528
180,000	35,076	46,764	58,464	70,152	81,840	93,528
220,000	44,076	58,764	73,464	88,152	102,840	117,528
over 220,000	44,076	58,764	73,464	88,152	102,840	117,528

(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.

US Based Employee Pension Plan

The Pension Plan for US based employees of Novartis Corporation and its affiliates (Pension Plan) is a funded, tax-qualified non-contributory defined-benefit pension plan that covers certain of our US employees, including Prof. Mark C. Fishman. The Pension Plan provides for different pension formulas depending on which Novartis company is the employer of a particular employee. The pension formula in which Prof. Mark C. Fishman participates under the Pension Plan is a pension equity (PEP) formula. Benefits under the PEP formula are based upon an employee's highest average earnings for a five calendar-year period during the last ten calendar years of service with Novartis and the employee's accumulated PEP credits (expressed as a percentage of final average earnings, and ranging from 2% to 13% for each year of service based on the employee's attained age in a particular year), and are payable after retirement in the form of an annuity or a lump sum. The amount of annual earnings covered by the Pension Plan is generally equal to the employee's base salary and annual bonus. The amount of annual earnings that may be considered in calculating benefits under the Pension Plan is limited by law. For 2003, the annual limitation was $200,000.

Novartis Corporation and its United States affiliates also maintain various unfunded supplemental pension plans that each provide its employees with an amount substantially equal to the difference between the amount that would have been payable under the Pension Plan in the absence of legislation limiting pension benefits and the annual earnings that may be considered in calculating pension benefits under tax-qualified pension plans, and the amount actually payable under the Pension Plan.

Personal Loans, 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 our Directors or to the Executives. The two loans which had been granted to Executives prior to the Act, and which still were outstanding as of December 31, 2002, were repaid in 2003. As of December 31, 2003, no loans were outstanding to any of our Directors or executive officers.

Four Executives, including Daniel Vasella, have contracts with us granting them 36 months severance pay in the event they are terminated under certain circumstances. In addition, if any of these Executives is terminated during the 12 months following a change of control of Novartis, then their 36-month severance rights are extended for an additional 24 months.

One Executive has a contract with us granting him 12 months severance pay in the event he is terminated under certain circumstances, and an additional 12 months if his termination occurs during the 12 months following a change of control of Novartis.

Between January 1, 2003 and December 31, 2003, three Executives left the company. Under the terms of the agreements with those Executives, $1,795,000 has been paid as severance.

6.C Board Practices

The table below shows the terms of office of our Board of Directors:

Name	Start of Term	End of Term
Daniel Vasella, MD (Chairman)	1996	2004
Prof. Helmut Sihler, JD, PhD (Vice Chairman and Lead Director)	1996	2004
Hans-Jörg Rudloff (Vice Chairman)	1996	2004
Dr. h.c. Birgit Breuel	1996	2005
Prof. Peter Burckhardt, MD	1996	2005
Prof. Srikant Datar, PhD	2003	2006
Walter G. Frehner	1996	2004
William W. George	1999	2006
Alexandre F. Jetzer	1996	2005

Name	Start of Term	End of Term
Pierre Landolt	1996	2005
Prof. Ulrich Lehner, PhD	2002	2005
Heini Lippuner	1996	2004
Dr.-Ing. Wendelin Wiedeking	2003	2006
Prof. Rolf M. Zinkernagel, MD	1999	2006

Board Committees

Decisions are made by the Board of Directors as a whole. To assist the Board in carrying out its duties four committees have been created: the Chairman's Committee, the Compensation Committee, the Audit and Compliance Committee and the Corporate Governance Committee (the "Board Committees"). Each Board Committee has a written Charter outlining its duties and responsibilities. The Charters are available on our Internet website at http://www.novartis.com/investors/en/governance.shtml or can be ordered in print from the Corporate Secretary, Ingrid Duplain, JD. Each Committee has a chair elected by the Board. The Board Committees meet regularly and are charged with making full reports and recommendations to the Board at its regular meetings. The meeting agendas of the Board Committees are determined by their chairs. The Board Committee members receive in advance of Committee meetings materials allowing them to prepare for the handling of the items on the agenda.

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

Current members of the Chairman's Committee are Dr. Daniel Vasella (Chairman), Prof. Dr. Helmut Sihler, Hans-Jörg Rudloff, William W. George and Heini Lippuner.

The Compensation Committee

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

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

Current members of the Compensation Committee are Prof. Dr. Helmut Sihler (Chairman), Hans-Jörg Rudloff and William W. George.

The Audit and Compliance Committee

The Audit and Compliance Committee consists of three to five Directors. The Board has determined that all the members of the Committee are independent, as defined by the rules of the New York Stock Exchange as well as by the independence criteria of Novartis (see appendix to the Regulations of the Board and Committee Charters), and that its chair, Prof. Sihler, JD, PhD, is adequately qualified in financial management matters. The Board has determined that Prof. Ulrich Lehner, PhD has the accounting and financial management expertise required under the rules of the NYSE and is a financial expert as defined by the US Securities and Exchange Commission. The Board has also assured 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:

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

To be directly responsible for the oversight and compensation of the external auditors (including the resolution of any disagreement between management and the external auditors regarding financial reporting).

To approve (or not approve) on an individual basis audit related and other approvable services falling outside the pre-approved categories.

To establish procedures for (a) the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters and (b) the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters.

To review disclosures made by our principal executive officer and principal financial officer regarding compliance with their certification obligations, including our disclosure controls and procedures and internal control over financial reporting and evaluations thereof.

To ensure that the lead audit partner of the external auditors and the audit partner responsible for reviewing the audit are rotated at least every five years and to issue policies for our hiring of employees or former employees of the external auditors who were engaged on our account.

To conduct an annual self-evaluation of the Committee's own performance.

To review annually the external audit scope, audit plans and relevant processes, the results of the external audit, and whether recommendations made have been implemented by our management.

To discuss with the external auditors the results of the audit, any unusual items or disclosures contained in the audit, and the matters required by the American Institute of Certified Public Accountants' Statement on Auditing Standards No. 61, as amended by the American Institute of Certified Public Accountants' Statement on Auditing Standards No. 89 and No. 90.

To review annually the internal audit scope, audit plans and relevant processes, the results of the internal audit, and whether recommendations made have been implemented by our management. The Committee must also periodically discuss the above matters with the external auditors.

To review with external and internal auditors, and with our financial and accounting personnel, our accounting policies and financial controls.

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

To review and discuss with management and the external auditors the quarterly and annual financial statements and annual report to consider whether they conform to accepted accounting principles and with the standards we have set.

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

To review compliance by our management with those of our policies designated by the Board from time to time, including the Code of Conduct, the Code of Ethics for the Chief Executive Officer and the Senior Financial Officers, and the Insider Trading Policy.

To oversee our participation in the Global Compact.

Current members of the Audit and Compliance Committee are Prof. Dr. Helmut Sihler (Chairman), Dr. h.c. Birgit Breuel, Walter G. Frehner and Dr. Ulrich Lehner. Prof. Srikant Datar, PhD was a member of the Audit and Compliance Committee during 2003, and had been determined by the Board to have the accounting and financial management expertise required under the rules of the NYSE and to be an additional financial expert, as defined by the US Securities and Exchange Commission. However, new NYSE rules which were published in 2003, and which will become effective in November 2004, will require us to look back three years in order to determine whether a Director is independent. For this reason, when the new NYSE rule takes effect, Prof. Datar's professional engagement for Novartis AG prior to his nomination as Director will cause him to no longer be considered "independent." As a consequence, in December 2003, Prof. Datar stepped down from the Audit and Compliance Committee, which requires all members to be independent.

The Corporate Governance Committee

The Corporate Governance Committee consists of three to five independent Directors. The Committee's main duties are:

To develop principles of corporate governance and recommend them to the Board for its approval.

To review at least annually the principles of corporate governance approved by the Board to ensure that they remain relevant and are being complied with.

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

To determine the criteria for selection of the Chairman and Chief Executive Officer, Directors and Board Committee members.

To plan for continuity on the Board as existing Board members retire or rotate off the Board.

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

To evaluate the performance of current Directors proposed for re-election, and recommend to the Board as to whether Directors should stand for re-election.

To conduct an annual evaluation of the Board as a whole.

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

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

To review directorships and consulting agreements of Board members for conflicts of interest.

To annually submit to the full Board a proposal concerning the determination of the independence status of the Board members and the corresponding disclosure (as required by applicable laws, regulations and listing standards).

Current members of the Corporate Governance Committee are William W. George (Chairman), Prof. Dr. Helmut Sihler, Hans-Jörg Rudloff and Prof. Dr. Rolf Zinkernagel, MD.

Directors Service Contracts

We have no contracts with any of our non-Executive Directors which would provide for benefits upon termination of employment. Daniel Vasella, in his capacity as CEO, is entitled to receive benefits upon termination. See "Item 6. Directors, Senior Management and Employees 6.B Compensation Swiss Employee Benefit Plans" and "Item 6. Directors, Senior Management and Employees 6.B Compensation Personal Loans, Consulting, Change of Control and Severance Agreements."

Home Country Practices

We are in compliance with the corporate governance standards of the New York Stock Exchange and applicable US law with two exceptions in which we continue to apply the practices of our home country, Switzerland.

Swiss law requires that our external auditors be appointed by our shareholders at our Annual General Meeting, and not by the Audit and Compliance Committee.

Our equity compensation plans are not the subject of a shareholders vote at the Annual General Meeting. Instead, in accordance with Swiss company practices, such plans are decided upon by the management and Boards of Directors of our local affiliates. It is intended that all such plans be established within the policies and programs approved by the Compensation Committee of the Novartis AG Board of Directors.

6.D Employees

The table below sets forth the breakdown of the total year-end number of our full time equivalent employees by main category of activity and geographic area for the past three years.

For the year ended December 31, 2003 (full time equivalents)	Research & Development	Production & Supply	Marketing & Sales	General & Administration	Total
USA	3,463	5,013	9,292	2,066	19,834
Canada and Latin America	302	2,937	4,620	915	8,774
Europe	6,904	12,404	13,161	5,041	37,510
Africa/Asia/Australia	905	2,307	7,943	1,268	12,423
Total	**11,574**	**22,661**	**35,016**	**9,290**	**78,541**

For the year ended December 31, 2003 (full time equivalents)	Research & Development	Production & Supply	Marketing & Sales	General & Administration	Total

For the year ended December 31, 2002 (full time equivalents)	Research & Development	Production & Supply	Marketing & Sales	General & Administration	Total
USA	3,214	5,097	9,062	1,971	19,344
Canada and Latin America	297	3,667	4,671	349	8,984
Europe	6,320	10,467	11,487	4,321	32,595
Africa/Asia/Australia	821	2,906	7,873	354	11,954
Total	**10,652**	**22,137**	**33,093**	**6,995**	**72,877**

For the year ended December 31, 2001 (full time equivalents)	Research & Development	Production & Supply	Marketing & Sales	General & Administration	Total
USA	2,786	5,473	7,207	2,487	17,953
Canada and Latin America	257	3,608	4,543	942	9,350
Europe	5,804	9,875	10,532	5,175	31,386
Africa/Asia/Australia	741	3,502	7,146	1,038	12,427
Total	**9,588**	**22,458**	**29,428**	**9,642**	**71,116**

A relatively small number of our employees are represented by unions. We have not experienced any material work stoppages in recent years, and we consider our employee relations to be good.

6.E Share Ownership

The aggregate amount of our shares owned by current non-executive Directors and Executives (including persons closely linked to them) as of December 31, 2003 was 1,237,157 shares, which amount is less than 1% of our outstanding shares. No individual non-executive Director or Executive owned 1% or more of our outstanding shares. However, our Director Pierre Landolt is also the Chairman of the Board of Directors of Emasan AG. See "Item 7. Major Shareholders and Related Party Transactions 7.A Major Shareholders."

The aggregate amount of Novartis share and ADS options, including other information regarding the options, held by current Directors and the Executives as of December 31, 2003 is set forth below:

Title of Options	Amount of shares called for by the options	Exercise Price[1] (CHF)	Purchase Price (if any)	Expiration Date	Total number of options held
Novas07 Options	1	42.80	0	January 15, 2007	53,360
Novas08 Options	1	68.40	0	January 16, 2008	118,200
Novas09 Options	1	51.33	0	March 10, 2009	522,400
Novas10 Options	1	70.00	0	March 7, 2010	481,960
Novas11 Options	1	62.00	0	March 7, 2011	1,772,103
Novas12 Options	1	49.00	0	February 3, 2012	2,710,864

Title of Options	Amount of shares called for by the options	Exercise Price[1] (CHF)	Purchase Price (if any)	Expiration Date	Total number of options held
Total Novartis Share Options					**5,658,887**
Novartis ADS Options Cycle V	1	$41.97	0	March 7, 2011	98,590
Novartis ADS Options Cycle VI	1	$37.28	0	March 7, 2012	477,698
Novartis ADS Options Cycle VII	1	$36.31	0	February 4, 2013	471,550
Novartis ADS Options Others	1	$37.86	0	October 26, 2011	10,000
Total Novartis ADS Options					**1,057,838**

(1) Exercise price indicated is per share.

Novartis Employee Ownership Plans

Pursuant to the prior Novartis Employee Ownership Plan, which was approved by the Board of Directors in 1998, all employees of our Swiss affiliates were entitled to purchase 120 shares, at a predetermined discount price, after each full year of service. In 2001, the price was set at CHF 12.50 per share. 80 of the shares were freely disposable, and 40 of the shares were required to be deposited with us until the person concerned leaves the employment, or retires from, the relevant Swiss affiliate. These employees were then required to immediately buy the shares to which they became entitled. During 2002 and 2001, an aggregate of 406,448 and 862,720 shares, respectively, were acquired by these employees under this plan.

A new Novartis Employee Ownership Plan was introduced in January 2002 for all employees of our Swiss affiliates, replacing the prior plan. These employees receive an annual incentive bonus delivered in Novartis shares at a fixed date at the then valid fair market value of the shares. This plan allows these employees to choose to immediately sell either all or half of the shares received, or to keep all the shares for a three year vesting period, at which time we will give the employee one additional free share for every two shares retained and deposited by the employee under this plan. In March 2003, our Swiss employees received an aggregate of 3,942,687 shares under this plan.

Beginning January 2002, two share ownership plans were introduced for employees of our UK affiliates. The first is the Novartis UK Share Ownership Plan, a UK Inland Revenue-approved plan set up under a Trust. For every two shares purchased, employees will receive one share free. However, the employee would forfeit the matching share and any tax relief received if the employee were to leave the employ of his or her UK employer within 3 years of the award. If the shares are held in the plan for 5 years or more then the employee will not be liable for any form of tax on either the shares they purchased or the free matching shares. The employee's maximum annual investment under this plan is GBP 1,500.

Under the second UK plan, the Novartis UK Incentive Conversion Plan, employees can invest their net incentive bonus, which is the maximum allowable payment to the Novartis UK Share Ownership Plan. For every two shares purchased the employee will receive one free share. But the employee would forfeit the free share if the employee leaves the employ of his or her UK employer within 3 years of the award.

Item 7. Major Shareholders and Related Party Transactions

7.A Major Shareholders

Based on our share register, we believe that we are not directly or indirectly owned or controlled by another corporation or government, and that there are no arrangements that may result in a change of control.

As of December 31, 2003, our registered share capital was CHF 1,400,735,000, divided into 2,801,470,000 shares with a nominal value of CHF 0.50 each. Based on our share register, it appears that approximately 62% of our registered shares are held in Switzerland, and approximately 26% of our shares which are registered by name are held in the United States. However, since certain of our shares are held by brokers or other nominees, and because 25% of our shares are not registered in anyone's name, the above numbers are not representative of the actual number of beneficial owners of our shares located in the US or in Switzerland.

As of December 31, 2003 no person or entity was the owner of more than 5% of our shares, whether or not the voting rights of such shares were exercisable. Our largest registered shareholders are Emasan AG (3.1%) and the Novartis Foundation for Employee Participation (3.3%), the same percentages as they held in 2002. Both shareholders are entered in the share register with voting rights for their entire shareholdings.

The largest registered nominee shareholder with voting rights is JPMorgan Chase (7.7%), which entered into a nominee agreement with us and disclosed the names, addresses and number of shares of the beneficial owners for whose account it holds the shares. JPMorgan Chase also holds an additional 5.4% of our shares in its capacity as the Depositary for our ADSs. The second largest nominee shareholder is Nortrust Nominees (2.2%). However, because it has not disclosed the shareholders for whom it holds the shares, it is only entitled to vote up to 0.5% of the total number of registered shares. See "Item 10. Additional Information 10.B Memorandum and Articles of Association 10.B.3 Shareholder Rights (b)." No other nominee shareholders nor any beneficial owner known to us holds more than 2% of our shares.

Shares

We have one class of shares. As of December 31, 2003, a total of 2,801,470,000 shares were issued, with a nominal value of CHF 0.50 each. The shares are fully paid-in and non-assessable.

We may issue certificates representing several shares. Shareholders may exchange these certificates at any time for certificates representing smaller numbers of shares, or for individual share certificates. If the owner of the shares consents, we may renounce the printing and delivery of share certificates.

Capital Structure

As of December 31, 2003, our share capital was CHF 1,400,735,000, made up of 2,801,470,000 fully paid-in registered shares, each with the nominal value of CHF 0.50. On March 4, 2003, our shareholders approved a reduction of our share capital by CHF 11,340,000. We have submitted a new proposal to our shareholders, to be voted upon at their next Shareholders Meeting on February 24, 2004, for a further reduction of our share capital by CHF 12,130,000.

As of December 31, 2003, we held 427,001,675 shares in our treasury, calculated in accordance with US GAAP. When calculated in accordance with IFRS, the number of treasury shares was 333,701,340. These numbers differ because of varying rules regarding whether shares held by certain foundations, which are independent from Novartis under Swiss company law, must be consolidated with shares held by the Group as treasury shares. US GAAP requires that we consolidate shares held by the employee share participation foundation. This is not required under IAS.

In May 2001 we made available to US investors a direct share purchase and dividend reinvestment program for ADRs through our depositary bank, JPMorgan Chase. See "Item 5. Operating and Financial Review and Prospects 5.B. Liquidity and Capital Resources."

American Depositary Shares

We incorporate by reference the disclosure regarding our ADS program included in the registration statement on Form 20-F/A (File No. I-15024), as filed with the Commission on May 9, 2000, in the section entitled "Part II Item 14. Description of Securities to be Registered American Depositary Receipts."

On May 3, 2001, we filed an Amendment No. 2 to the Amended and Restated Deposit Agreement, dated as of May 7, 2001, pursuant to the Registration Statement on Form F-6 (File No. 333-13446). The Amendment No. 2 changed the ADS-to-share ratio from 40-to-1 to 1-to-1.

On January 31, 2002, we filed a Restricted Issuance Agreement dated as of January 11, 2002, supplementing Amendment No. 2 to the Amended and Restated Deposit Agreement dated as of May 3, 2001, as an exhibit to the Registration Statement on Form F-3 (File No. 333-81862). The Restricted Issuance Agreement supplemented the Deposit Agreement to permit the deposit of restricted ADSs into a parallel facility to the ADR facility established in the Deposit Agreement.

7.B Related Party Transactions

We have formed certain foundations for the purpose 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 our consolidated financial statements prepared under IFRS, as Standard No. 12, as issued by the Standing Interpretations Committee exempts post-employment and equity compensation plans from its scope. The total assets of this foundation, as of December 31, 2003, included 93.3 million of our shares with a market value of approximately $4.2 billion. As of December 31, 2002, the assets included 95.1 million of our shares with a market value of approximately $3.4 billion. As of December 31, 2001, the assets included 101.3 million of our shares with a fair market value of $3.6 billion. This foundation has been consolidated with our financial statements under US GAAP, and is included as a reconciling item in the US GAAP reconciliation.

In 2003 we granted short-term loans totaling $651 million to the employee welfare and other foundations and received short-term loans totaling $8 million from them. In 2002 we granted short-term loans totaling $623 million to the employee welfare and other foundations and received short-term loans totaling $2 million from them. In 2001, we granted short-term loans totaling $709 million to these foundations and received short-term loans totaling $6 million from them.

7.C Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

8.A Consolidated Statements and Other Financial Information

8.A.1 See Item 18.

8.A.2 See Item 18.

8.A.3 See Report of Independent Auditors, page F-2.

8.A.4 We have complied with this requirement.

8.A.5 Not applicable.

8.A.6 Not applicable.

8.A.7 Legal proceedings.

A number of our affiliates are the subject of litigation arising out of the normal conduct of their business. As a result, claims could be made against them which, in whole or in part, might not be covered by insurance. In our opinion, however, the outcome of these actions will not materially affect our financial condition but could be material to our results of operations in a given period. In the interest of transparency we are providing information on the following civil cases:

Augmentin® (amoxicillin/potassium clavulanate): A series of lawsuits by GlaxoSmithKline (GSK) regarding amoxicillin/potassium clavulanate, our generic version of GSK's Augmentin®, have been resolved in our favor. We launched the first generic version of this GSK product in the US in July 2002, following favorable decisions by the United States District Court for the Eastern District of Virginia, which invalidated seven patents alleged by GSK to cover its Augmentin® product. GSK's appeal of the district court's decision was unsuccessful. We have also resolved actions which GSK initiated in state courts and before the US International Trade Commission, alleging that the potassium clavulanate used in manufacturing our product is produced using GSK trade secrets, an allegation which our affiliates denied. In July 2003, an agreement was reached on this issue with GSK. Under the terms of the agreement, GSK will receive single-digit percentage royalties on US sales of generic versions of Augmentin® sold by us for the four-year period from July 2002 through June 2006.

Average Wholesale Price Litigation: Claims have been brought against various US pharmaceutical companies, including Novartis affiliates, alleging that they have fraudulently overstated the Average Wholesale Price (AWP) and "best price," which are used by the US government to calculate Medicare and Medicaid reimbursements. Novartis affiliates have been named in a number of these cases. We have also voluntarily participated in an ongoing Congressional inquiry on the subject of AWP and pharmaceutical pricing. Discovery is in process against certain defendants in these cases, but not yet against us.

Pharmaceutical Antitrust Litigation: A Novartis affiliate, along with numerous other prescription drug manufacturers, is a co-defendant in various actions brought by certain US retail pharmacies alleging antitrust and pricing violations. Pretrial motion practice is underway. A trial is scheduled in one of these actions to commence in late 2004.

PPA: Novartis affiliates are parties to over 400 lawsuits in the US brought by people claiming to have been injured by products containing phenylpropanolamine (PPA) sold by certain of those affiliates. These cases are in various stages of litigation with Novartis having achieved victories in the first three claims to have gone to trial. However, other trials are currently ongoing, and more will follow. There can be no guarantee that our initial successes will be repeated or sustained in the event of an appeal.

SMON: (Subacute Myelo Optico Neuropathy): In 1996 an affiliate of Ciba-Geigy, one of our predecessor companies, together with two other pharmaceutical companies, settled certain product liability issues related to sales of its product *Clioquinol* in Japan. Under the settlement, one of our affiliates is required to pay certain future health care costs of the claimants.

Terazosin: One of our Sandoz affiliates is a defendant in a number of lawsuits in the US claiming injuries and damages allegedly arising out of violation of antitrust laws in the settlement, by the affiliate and Abbott Pharmaceuticals, of a contentious patent litigation involving Abbott's Hytrin® and the Sandoz generic equivalent product. Our affiliate has a judgment sharing agreement with Abbott that caps its liability. In addition, in one of the proceedings, we were successful in overturning on appeal a trial court decision that the settlement of the litigation was *per se* unlawful, and certifying a plaintiff's class. The case has been remanded to the trial court for further proceedings.

US enteral pump market: One of our Medical Nutrition affiliates in the US is a subject of an investigation by the US Department of Justice regarding marketing and pricing practices in the US enteral pump markets, including whether certain federal criminal statutes have been violated. We are cooperating with that investigation.

We believe that our affiliates have meritorious defenses in these cases, and they are vigorously defending each of them.

We maintain general liability insurance, including product liability insurance, covering claims on a worldwide basis. While claims could be made against our affiliates which, in whole or in part, might not be covered by insurance, we believe that our insurance coverage limits and retention amounts are reasonable and prudent in light of our businesses and the risks to which we are subject.

More generally, from time to time, we may be the subject of government investigations arising out of the normal conduct of our business. Consistent with our Code of Conduct and our policies regarding compliance with law, it is our policy to cooperate with such investigations.

8.A.8. Dividend policy

Subject to the dividend policy described below, our Board of Directors expects to recommend the payment of a dividend in respect of each financial year. If approved by our shareholders at the relevant annual Shareholders' Meeting, the dividends will be payable immediately following such approval. Any shareholder who purchased our shares on or before the second trading day after the shareholders' meeting shall be deemed to be entitled to receive the dividends and, in bonus issues, new shares, and to exercise shareholders' preemption rights to participate in issues of securities. Dividends are reflected in our financial statements in the year in which they are approved by our shareholders.

Our Board's stated policy is that, over the long term, the size of the dividend should be geared to growth in our after-tax earnings. All future dividends paid by us will depend upon our financial condition at the time, the results of our operations and other factors.

The Board will propose a dividend of CHF 1.00 per share to the shareholders for approval at the Annual General Meeting to be held on February 24, 2004. Because we pay dividends in Swiss francs, exchange rate fluctuations will affect the US dollar amounts received by holders of ADSs. For a summary of dividends we paid in the past five years, see "Item 3. Key Information 3.A Selected Financial Data Cash Dividends per Share."

8.B Significant Changes

On March 4, 2003, our shareholders approved a reduction of our share capital by CHF 11,340,000. Our share capital is now CHF 1,400,735,000 and is divided into 2,801,470,000 shares with a nominal value of CHF 0.50 each.

We will submit a new proposal to our shareholders, to be voted upon at their next Annual General Meeting on February 24, 2004, for a further reduction of our share capital by CHF 12,130,000, as a means of fully retiring those shares acquired as a result of the share repurchase program announced in July 2002. In addition, we will propose to our shareholders, to be voted on at the February 24, 2004 Annual General Meeting, to initiate a fourth share repurchase program of up to CHF 3 billion, and to reduce our share capital by the amounts repurchased as a result of the fourth repurchase program in each year, starting in 2005.

Item 9. The Offer and Listing

9.A Listing Details

Our shares are listed in Switzerland on the SWX Swiss Exchange ("SWX"). The principal trading market for our shares is the virt-x, a virtual exchange created by, among others, the SWX. Prior to the creation of virt-x in June 2001, our shares were traded on the SWX. Since 1996, our shares were quoted on London's SEAQ International and now on the International Retail Service of the London Stock Exchange.

American Depositary Shares (ADSs), each representing one share, have been available in the US through an American Depositary Receipts (ADR) program since December 1996. This program was established pursuant to a Deposit Agreement which we entered into with J.P. Morgan Chase & Co. as Depositary (the "Deposit Agreement"). Our ADSs have been listed on the NYSE since May 2000, and are traded under the symbol "NVS."

The table below sets forth, for the periods indicated, the high and low closing sales prices for our shares traded in Switzerland and for ADSs traded in US. The data below regarding our shares reflects price and volume information for trades completed by members of the virt-x (or the SWX, as applicable) during the day as well as for inter-dealer trades completed off the virt-x (or the SWX, as applicable) and certain inter-dealer trades completed during trading on the previous business day. The data below has been adjusted to reflect the 40-for-1 share split and diminution in nominal share value from CHF 20 to CHF 0.50 and the ADS-share ratio change from 40-for-1 to 1-for-1 effective May 7, 2001. Each ADS now represents one share.

The following share data was taken from virt-x and SWX; the ADS data was taken from Bloomberg:

	Shares		ADSs	
	High	Low	High	Low
	(CHF per share)		($ per ADS)	
Annual information for the past five years				
2003	56.15	46.05	45.89	35.54
2002	69.10	50.00	43.83	34.10
2001	74.15	54.95	45.00	32.98
2000[1]	73.90	49.72	44.75	35.12
1999[1]	72.95	42.68	53.13	34.63
Quarterly information for the past two years				
2003				
First Quarter	54.80	46.05	39.02	34.54
Second Quarter	55.30	49.75	41.85	36.71
Third Quarter	55.70	51.05	40.22	36.97
Fourth Quarter	56.15	50.55	45.89	37.24
2002				
First Quarter	66.55	56.60	39.65	34.30
Second Quarter	69.10	58.50	43.83	38.13
Third Quarter	65.30	50.50	43.56	34.10
Fourth Quarter	60.50	50.00	40.62	35.53
Monthly information for most recent six months				
August 2003	53.15	51.05	38.61	36.97
September 2003	55.70	51.10	40.22	37.00
October 2003	53.75	50.55	40.55	38.06
November 2003	54.95	50.75	42.22	37.24
December 2003	56.15	54.80	45.89	42.35
January 2004 (through January 27)	58.50	56.95	47.15	45.61

(1) Share prices have been revised for 2000 and 1999, to reflect the share split which occurred on May 7, 2001 resulting in a share : ADS ratio change from 40:1 to 1:1.

Fluctuations in the exchange rate between the Swiss franc and the US dollar will affect any comparisons of Swiss share prices and US ADS prices.

The average daily volumes traded on the virt-x (or the SWX, as applicable) for the years 2003, 2002 and 2001 were 9,927,022, 9,744,732 and 5,311,320 respectively. These numbers were based on total annual turnover statistics supplied by the virt-x (or the SWX as applicable) via the Swiss Market Feed, which supplies such data to subscribers and to other information providers. The average daily volumes traded on the NYSE for the years 2003, 2002 and 2001 were 716,996, 468,792 and 472,108, respectively.

A 2-for-1 share split for the ADSs was affected on May 11, 2000. A 40-for-1 share split of the shares was affected on May 7, 2001 simultaneously with an ADS-to-share ratio change from 40-for -1 to 1-for-1. We believe that the significant increase in trading volume of the shares between 2001 and 2002 was a result of the 40-for -1 share split.

The Depositary has informed us that as of January 27, 2004, there were 152,733,999 ADSs outstanding, each representing one Novartis share (approximately 3.35% of all issued and outstanding shares, including treasury shares). On January 27, 2004, the closing sales price per share on the virt-x was CHF 58.50 and per ADS on the NYSE was $47.00.

9.B Plan of Distribution

Not applicable.

9.C Market

See "9.A Listing Details."

9.D Selling Shareholders

Not applicable.

9.E Dilution

Not applicable.

9.F Expenses of the Issue

Not applicable.

Item 10. Additional Information

10.A Share capital

Not applicable.

10.B Memorandum and Articles of Association

The following is a summary of certain provisions of our Articles of Incorporation (the "Articles"), and of the Swiss Code of Obligations (the "Swiss Code"). This is not a summary of all the significant provisions of the Articles or of Swiss law. This summary is qualified in its entirety by reference to the Articles, which are an exhibit to this Form 20-F, and to Swiss law.

10.B.1 ***Company Purpose***

Novartis AG is registered in the commercial register of the Canton of Basel-Stadt, Switzerland under number CH-270.3.002.061-2. Our business purpose, as stated in Article 2 of the Articles, is to hold interests in enterprises in the area of health care or nutrition. We may also hold interests in enterprises in the areas of biology, chemistry, physics, information technology or related areas. We may acquire, mortgage, liquidate or sell real estate and intellectual property rights in Switzerland or abroad.

10.B.2 ***Directors***

(a) According to our Regulations of the Board (the "Board Regulations"), our Directors may not participate in deliberations or resolutions on matters which affect, or reasonably might affect, the Director's interests, or the interests of a person close to the Director. In addition, while the Swiss Code does not have a specific provision on conflicts of interests, the Swiss Code does require directors and members of senior management to safeguard the interests of the corporation and, in this connection, imposes a duty of care and a duty of loyalty on such persons. This rule is generally interpreted to mean that directors and members of senior management are disqualified from participating in decisions which affect them personally. Directors and officers are personally liable to the corporation for any breach of these provisions.

(b) Directors may not vote that they receive compensation unless at least a majority of the Directors are present.

(c) The Articles and the Board Regulations contain no specific provision permitting or prohibiting Directors from borrowing from us. The Articles do permit the Board of Directors to pass resolutions with respect to all matters, such as this one, which are not reserved to the authority of the General Meeting of Shareholders by law or by the Articles. In addition, Swiss law contains a provision under which a Director, or any other persons associated with a Director, must refund to the corporation any payments made to them by the corporation, other than payments made at arm's length. Under the provisions of the US Sarbanes-Oxley Act, enacted in July 2002, no new loans may be given to directors or executive officers. Prior to the Act, loans had been granted to two executive officers. These loans have been repaid in full.

(d) Directors must retire effective as of the next Ordinary General Meeting of shareholders after they have completed their twelfth year on the Board, or when they reach age 71, whichever comes first. The General Meeting may, under special circumstances, grant an exception from

this rule and may elect a Director for another term of no more than four years. A proposal will be made at the fourth coming Annual General Meeting to be held on February 24, 2004 to amend our Articles of Incorporation so that the Annual General Meeting grant exceptions for "further" terms, rather than "another" term, and limiting the length of such further terms to three years, rather than four.

(e) Under the Articles and Swiss law, each of our Directors must also be a shareholder. Ownership of one share is sufficient to satisfy this requirement.

10.B.3 ***Shareholder Rights***

Because we have only one class of registered shares, the following information applies to all shareholders.

(a) Swiss law requires that at least 5% of our annual net profits be retained as general reserves, so long as these reserves amount to less than 20% of our registered share capital. The law and the Articles permit us to accrue additional reserves.

Under Swiss law, we may only pay dividends if we have sufficient distributable retained earnings from previous fiscal years, or if our reserves are sufficient to allow distribution of a dividend. In either event, under Swiss law, while the Board of Directors may propose that a dividend be paid, we may only pay dividends upon shareholder approval at a shareholders' meeting. Our auditors must confirm that the dividend proposal of the Board conforms with the Swiss Code of Obligations and the Articles. Our Board of Directors intends to propose a dividend once each year. See "Item 3. Key Information 3.A. Selected Financial Data Cash Dividends per Share."

Dividends are usually due and payable immediately after the shareholders have passed a resolution approving the payment. Dividends which have not been claimed within five years after the due date fall back to us, and are allocated to our general reserves. For information about deduction of the withholding tax from dividend payments, see "Item 10. Additional Information 10.E Taxation."

(b) Each share is entitled to one vote at the shareholders' meeting. A shareholder may exercise its right to vote its shares only after the shareholder has been recorded in the share register as being entitled to such rights at least 20 days in advance. In order to do so, the shareholder must file a share registration form with us at least 20 days in advance, setting forth the shareholder's name, address and citizenship (or, in the case of a legal entity, its registered office). If the shareholder has not filed the form at least 20 days in advance, then the shareholder may not vote at, or participate in, shareholders' meetings.

To vote its shares, the shareholder must also explicitly declare that it has acquired the shares in its own name and for its own account. If the shareholder refuses to make such a declaration, the shares may not be voted unless the Board of Directors grants voting rights to a nominee for those shares. The Board of Directors may grant such nominees the right to vote up to 0.5% of the total number of registered shares.

No shareholder or group of shareholders may vote more than 2% of the registered shares. If a shareholder holds more than 2% of Novartis' shares, that shareholder will be entitled to register the excess shares, but not to cast votes based upon them.

For purposes of the 2% rule for shareholders and the 0.5% rule for nominees, groups of companies and groups of shareholders acting in concert are considered to be one shareholder. The Board of Directors may, on a case by case basis, allow exceptions from both the 2% rule for shareholders and the 0.5% rule for nominees. The Board may delegate this power. To date, such a request has never been denied. Finally, the shareholders may cancel the voting restrictions upon a resolution carrying a two-thirds majority of the vote at a shareholders meeting.

After hearing the registered shareholder or nominee, the Board of Directors may cancel, with retroactive effect as of the date of registration, the registration of shareholders if the registration was effected based on false information.

Shareholders' resolutions generally require the approval of a majority of the votes present at a shareholders' meeting. As a result, abstentions have the effect of votes against the resolution. Shareholders' resolutions requiring a vote by such "absolute majority" include (1) amendments to the Articles; (2) elections of directors and statutory auditors; (3) approval of the annual report and the annual accounts; (4) setting the annual dividend; (5) decisions to discharge directors and management from liability for matters disclosed to the shareholders' meeting; and (6) the ordering of an independent investigation into specific matters proposed to the shareholders' meeting.

According to the Articles and Swiss law, the following types of shareholders' resolutions require the approval of a "supermajority" of at least two-thirds of the votes present at a shareholders' meeting: (1) an alteration of our corporate purpose; (2) the creation of shares with increased voting powers; (3) an implementation of restrictions on the transfer of registered shares and the removal of such restrictions; (4) an

authorized or conditional increase of the share capital; (5) an increase of the share capital by conversion of equity, by contribution in kind, or for the purpose of an acquisition of property or the grant of special rights; (6) a restriction or an elimination of shareholders' preemptive rights; (7) a change of our domicile; (8) our dissolution without liquidation (*e.g.*, by a merger); or (9) any amendment to the Articles which would create or eliminate a supermajority requirement.

At shareholders' meetings, shareholders can be represented by proxy. However, a proxy must either be the shareholder's legal representative, another shareholder with the right to vote, a proxy appointed by us, an independent representative nominated by us, or a depositary. Votes are taken either by a show of hands or by electronic voting, unless the shareholders' meeting resolves to have a ballot or where a ballot is ordered by the chairman of the meeting.

The Directors' terms of office are coordinated so that in each year approximately one-third of all the Directors are subject to re-election or election. However, cumulative voting of shares is not permitted under Swiss law.

(c) Shareholders have the right to allocate the profit shown on our balance sheet by vote taken at the General Meeting of the Shareholders, subject to the legal requirements described in Item 10.B.3(a).

(d) Under Swiss law, any surplus arising out of a liquidation of our company (*i.e.*, after the settlement of all claims of all creditors) would be distributed to the shareholders in proportion to the paid-in nominal value of their shares.

(e) Swiss law limits a corporation's ability to hold or repurchase its own shares. We and our subsidiaries may only repurchase shares if we have free reserves equal to the purchase price to be paid for the shares. The aggregate nominal value of all Novartis shares held by us and our subsidiaries may not exceed 10% of the nominal value of our share capital. In addition, we are required to create a special reserve on our balance sheet in the amount of the purchase price of the acquired shares. Repurchased shares held by us or our subsidiaries do not carry any rights to vote at the shareholders' meeting, but are entitled to the economic benefits generally connected with the shares. It should be noted that the

definition of what constitutes subsidiaries, and therefore, treasury shares, for purposes of the above described reserves requirement and voting restrictions differs from the definition included in the consolidated financial statements. The definition in the consolidated financial statements requires consolidation for financial reporting purposes of special purpose entities, irrespective of their legal structure, in instances where we have the power to govern the financial and operating policies of the entity so as to obtain benefits from its activities.

We may also repurchase shares for the purpose of capital reduction, which can only take place if the shareholders pass a resolution approving such reduction. We intend to propose to the next shareholders' meeting a reduction of our share capital of CHF 12,130,000.

(f) Not applicable.

(g) Since all of our issued and outstanding shares have been fully paid in, we can make no further capital calls on our shareholders.

(h) See Items 10.B.3(b) and 10.B.7.

10.B.4 ***Changes To Shareholder Rights***

Under Swiss law, we may not issue new shares without the prior approval of the shareholders. If a new issue is approved, then our shareholders would have certain preemptive rights to obtain newly issued shares in an amount proportional to the nominal value of the shares they already hold. These preemptive rights could be modified in certain limited circumstances with the approval of a resolution adopted at a shareholders' meeting by a supermajority of shares. In addition, we may not create shares with increased voting powers or place restrictions on the transfer of registered shares without the approval of a resolution adopted at a shareholders' meeting by a supermajority of shares. In addition, see Item 10.B.3(b) with regard to the Directors' ability to cancel the registration of shares under limited circumstances.

10.B.5 ***Shareholder Meetings***

Under Swiss law and the Articles, we must hold an annual ordinary shareholders' meeting within six months after the end of our financial year. Shareholders' meetings may be convened by the Board of Directors or, if necessary, by the statutory auditors. The Board is further required to convene an extraordinary shareholders' meeting if so resolved by a shareholders meeting, or if so requested by shareholders holding an aggregate of at least 10% of the registered shares, specifying the items for the agenda and their proposals. Shareholders holding shares with a

nominal value of at least CHF 1,000,000 (*i.e.*, 2,000,000 Novartis shares) have the right to request that a specific proposal be put on the agenda and voted upon at the next shareholders meeting. A shareholders' meeting is convened by publishing a notice in the Swiss Official Commercial Gazette (*Schweizerisches Handelsamtsblatt*) at least 20 days prior to such meeting. Shareholders may also be informed by mail. There is no provision in the Articles requiring a quorum for the holding of a shareholders' meeting. In addition see Item 10.B.3(b) regarding conditions for exercising a shareholder's right to vote at a shareholders' meeting.

10.B.6 ***Limitations***

There are no limitations under Swiss law or our Articles on the right of non-Swiss residents or nationals to own or vote shares other than the restrictions applicable to all shareholders.

10.B.7 ***Change in Control***

According to the Articles and the Swiss Code, shareholders may pass a resolution to merge with another corporation at any time. Such a resolution would require the consent of at least two-thirds of all votes present at the necessary shareholders' meeting.

Under the Swiss Stock Exchange Act, shareholders and groups of shareholders acting in concert who acquire more than 33$^{1}/_{3}$% of the voting rights of Novartis shares would be required to submit a takeover bid to all remaining shareholders. This mandatory bid obligation may be waived by the Swiss Takeover Board or the Swiss Federal Banking Commission under certain circumstances, in particular if another shareholder owns a higher percentage of voting rights than the acquirer. If no waiver is granted, the mandatory takeover bid would have to be made pursuant to the procedural rules set forth in the Swiss Stock Exchange Act and the ordinances enacted thereunder.

10.B.8 ***Disclosure of Shareholdings***

Under the Swiss Stock Exchange Act, holders of our voting shares would be required to notify us and the SWX of the level of their holdings whenever such holdings reach or exceed, or in some cases, fall short of, certain thresholds 5%, 10%, 20%, 33$^{1}/_{3}$%, 50% and 66$^{2}/_{3}$% of our registered share capital, whether or not the shareholder has the right to cast votes based on the shares. Following receipt of such notification we would be required to inform the public by publishing the information in the Swiss Official Commercial Gazette and in at least one of the principal electronic media that disseminate stock exchange information.

An additional disclosure obligation exists under Swiss law which requires us to disclose the identity of all of our shareholders (or related groups of shareholders) who have been granted an exception entitling them to vote more than 2% of our shares, as described in Item 10.B.3(b). Under Swiss law, disclosure of shareholders entitled to vote more than 2% but less than 5% of our shares must only be made once a year, in the notes to the financial statements published in our annual report.

10.B.9 ***Differences in the Law***

See the references to Swiss law throughout this Item 10.B, which highlight certain key differences between Swiss and US law.

10.B.10 ***Changes in Capital***

The requirements of the Articles regarding changes in capital are not more stringent than the requirements of Swiss law.

10.C Material contracts

There are no material contracts other than those entered into in the ordinary course of business.

10.D Exchange controls

There are no Swiss governmental laws, decrees or regulations that restrict the export or import of capital, including any foreign exchange controls, or that affect the remittance of dividends or other payments to non-residents or non-citizens of Switzerland who hold Novartis' shares.

10.E Taxation

The taxation discussion set forth below is intended only as a descriptive summary and does not purport to be a complete analysis or listing of all potential tax effects relevant to the ownership or disposition of our shares or ADSs. The statements of US and Swiss tax laws set forth below are based on the laws and regulations in force as of the date of this 20-F, including the current Convention Between the United States and the Swiss Confederation for the Avoidance of Double Taxation with Respect to Taxes on Income, entered into force on December 19, 1997 (the "Treaty"), and the US Internal Revenue Code of 1986, as amended (the "Code"), Treasury regulations, rulings, judicial decisions and administrative pronouncements, and may be subject to any changes in US and Swiss law, and in any double taxation

convention or treaty between the United States and Switzerland occurring after that date, which changes may have retroactive effect.

Swiss Taxation

Swiss Residents

Withholding Tax on Dividends and Distributions. Dividends which we pay and similar cash or in-kind distributions which we may make to a holder of shares or ADSs (including distributions of liquidation proceeds in excess of the nominal value, stock dividends and, under certain circumstances, proceeds from repurchases of shares by us in excess of the nominal value) are subject to a Swiss federal withholding tax (the "Withholding Tax") at a current rate of 35%. We are required to withhold this Withholding Tax from the gross distribution and to pay the Tax to the Swiss Federal Tax Administration. The Withholding Tax is refundable in full to Swiss residents who are the beneficial owners of the taxable distribution at the time it is resolved and duly report the gross distribution received on their personal tax return or in their financial statements for tax purposes, as the case may be.

Income Tax on Dividends. A Swiss resident who receives dividends and similar distributions (including stock dividends and liquidation surplus) on shares or ADSs is required to include such amounts in the shareholder's personal income tax return. A corporate shareholder may claim substantial relief from taxation of dividends and similar distributions received if the shares held represent a fair market value of at least CHF 2 million.

Capital Gains Tax upon Disposal of shares. Under current Swiss tax law, the gain realized on shares held by a Swiss resident who holds shares or ADSs as part of his private property is generally not subject to any federal, cantonal or municipal income taxation on gains realized on the sale or other disposal of shares or ADSs. However, gains realized upon a repurchase of shares by us may be characterized as taxable dividend income if certain conditions are met. Book gains realized on shares or ADSs held by a Swiss corporate entity or by a Swiss resident individual as part of the shareholder's business property are included in the taxable income of such person.

Residents of Other Countries

Recipients of dividends and similar distributions on the shares who are neither residents of Switzerland for tax purposes nor holding shares as part of a business conducted through a permanent establishment situated in Switzerland ("Non-resident Holders") are not subject to Swiss income taxes in respect of such distributions. Moreover, gains realized by such recipients upon the disposal of shares are not subject to Swiss income taxes.

Non-resident Holders of shares are, however, subject to the Withholding Tax on dividends and similar distributions mentioned above and under certain circumstances to the Stamp Duty described below. Such Non-resident Holders may be entitled to a partial refund of the Withholding Tax if the country in which they reside has entered into a bilateral treaty for the avoidance of double taxation with Switzerland. Non-resident Holders should be aware that the procedures for claiming treaty refunds (and the time frame required for obtaining a refund) may differ from country to country. Non-resident Holders should consult their own tax advisors regarding receipt, ownership, purchase, sale or other dispositions of shares or ADSs and the procedures for claiming a refund of the Withholding Tax.

As of January 1, 2004, Switzerland has entered into bilateral treaties for the avoidance of double taxation with respect to income taxes with the following countries, whereby a part of the above-mentioned Withholding Tax may be refunded (subject to the limitations set forth in such treaties):

Albania	Hungary	Lithuania	Slovak Republic
Australia	Iceland	Luxembourg	Slovenia
Austria	India	Macedonia	South Africa
Belarus	Indonesia	Malaysia	Spain
Belgium	Iran	Mexico	Sri Lanka
Bulgaria	Israel	Moldavia	Sweden
Canada	Italy	Mongolia	Thailand
China	Ivory Coast	Morocco	Trinidad and Tobago
Croatia	Republic of Ireland	Netherlands	Tunisia
Czech Republic	Jamaica	New Zealand	Ukraine
Denmark	Japan	Norway	United Kingdom
Ecuador	Kazakhstan	Pakistan	United States of America
Egypt	Republic of Korea	Philippines	Uzbekistan
Finland	(South Korea)	Poland	Venezuela
France	Kuwait	Portugal	Vietnam
Germany	Kyrgyzstan	Romania	Commonwealth of
Greece	Latvia	Russia	Independent States[1]
		Singapore	

[1] Excluding Estonia, Latvia, Lithuania and Russia.

Tax treaty negotiations are under way, or have been concluded, with Argentina (treaty not yet in force but provisionally applicable as from January 1, 2001), Armenia, Azerbaijan, Bangladesh, Brazil, Chile, Estonia, Ethiopia, Georgia, Turkey, Turkmenistan and Zimbabwe.

A Non-resident Holder of shares or ADSs will not be liable for any Swiss taxes other than the Withholding Tax described above and the Stamp Duty described below if the transfer occurs through or with a Swiss bank or other Swiss securities dealer. If, however, the shares or ADSs of Non-resident Holders can be attributed to a permanent establishment or a fixed place of business maintained by such person within Switzerland during the relevant tax year, the shares or ADSs may be subject to Swiss income taxes in respect of income and gains realized on the shares or ADSs and such person may qualify for a full refund of the Withholding Tax based on Swiss tax law.

Residents of the United States. A Non-resident Holder who is a resident of the United States for purposes of the Treaty is eligible for a reduced rate of tax on dividends equal to 15% of the dividend, provided that such holder (i) qualifies for benefits under the Treaty, (ii) holds, directly and indirectly, less than 10% of our voting stock, and (iii) does not conduct business through a permanent establishment or fixed base in Switzerland to which the shares or ADSs are attributable. Such an eligible holder must apply for a refund of the amount of the Withholding Tax in excess of the 15% Treaty rate. The claim for refund must be filed on Swiss Tax Form 82 (82C for corporations; 82I for individuals; 82E for other entities), which may be obtained from any Swiss Consulate General in the United States or from the Federal Tax Administration of Switzerland at the address below, together with an instruction form. Four copies of the form must be duly completed, signed before a notary public of the United States, and sent to the Federal Tax Administration of Switzerland, Eigerstrasse 65, CH-3003 Berne, Switzerland. The form must be accompanied by suitable evidence of deduction of Swiss tax withheld at source, such as certificates of deduction, signed bank vouchers or credit slips. The form may be filed on or after July 1 or January 1 following the date the dividend was payable, but no later than December 31 of the third year following the calendar year in which the dividend became payable. For US resident holders of ADSs, J.P. Morgan

Chase & Co. as Depositary, will comply with these Swiss procedures on behalf of the holders, and will remit the net amount to the holders.

Stamp Duty upon Transfer of Securities. The sale of shares, whether by Swiss residents or Non-resident Holders, may be subject to federal securities transfer Stamp Duty of 0.15%, calculated on the sale proceeds, if the sale occurs through or with a Swiss bank or other Swiss securities dealer, as defined in the Swiss Federal Stamp Duty Act. The Stamp Duty has to be paid by the securities dealer and may be charged to the parties in a taxable transaction who are not securities dealers. Stamp Duty may also be due if a sale of shares occurs with or through a non-Swiss bank or securities dealer, provided (i) such bank or dealer is a member of the SWX, and (ii) the sale takes place on the SWX. In addition to this Stamp Duty, the sale of shares by or through a member of the SWX may be subject to a minor stock exchange levy.

United States Federal Income Taxation

The following is a general discussion of the material US federal income tax consequences of the ownership and disposition of our shares or ADSs that may be relevant to you if you are a US Holder (as defined below). Because this discussion does not consider any specific circumstances of any particular holder of our shares or ADSs, persons who are subject to US taxation are strongly urged to consult their own tax advisers as to the overall US federal, state and local tax consequences, as well as to the overall Swiss and other foreign tax consequences, of the

ownership and disposition of our shares or ADSs. In particular, additional rules may apply to dealers in securities, tax-exempt entities, certain insurance companies, broker-dealers, investors liable for alternative minimum tax, investors that hold shares or ADSs as part of a straddle, hedging or conversion transaction, holders whose functional currency is not the US dollar, and holders of 10% or more of our outstanding share capital or voting power. This discussion generally applies only to US Holders who qualify for benefits under the Treaty, who hold the shares as a capital asset, and whose functional currency is the US dollar. Investors are urged to consult their own tax advisors concerning whether they are eligible for benefits under the Treaty.

For purposes of this discussion, a "US Holder" is a beneficial owner of Novartis shares or ADSs who is (i) an individual citizen or resident of the United States for US federal income tax purposes, (ii) a corporation or other entity created or organized under the laws of the United States or a state thereof, (iii) an estate the income of which is subject to US federal income taxation regardless of its source, or (iv) a trust subject to the primary supervision of a US court and the control of one or more US persons. If a partnership holds shares or ADSs, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If a US Holder is a partner in a partnership that holds shares or ADSs, the Holder is urged to consult its own tax advisor regarding the specific tax consequences of owning and disposing of such shares or ADSs.

This discussion assumes that each obligation in the Deposit Agreement and any related agreement will be performed in accordance with its terms.

Dividends. For US federal income tax purposes, US Holders will be required to include the full amount (including the amount of any Withholding Tax) of a dividend paid with respect to our shares or ADSs as ordinary income. For this purpose, a "dividend" will include any distribution paid by us with respect to our shares or ADSs (other than certain pro rata distributions of our capital stock or rights to subscribe for shares of our capital stock), as the case may be, but only to the extent such distribution is not in excess of our current and accumulated earnings and profits, as determined for US federal income tax purposes, based on the US dollar value of the distribution calculated by reference to the spot rate in effect on the date the distribution is actually or constructively received by a US Holder, in the case of shares, or by the Depositary, in the case of ADSs. Such dividend will constitute income from sources outside the United States for US foreign tax credit purposes. Subject to the limitations and conditions provided in the Code, US Holders may deduct from their US federal taxable income, or claim as a credit against their US federal income tax liability, the 15% withholding tax withheld pursuant to the Treaty. The rules governing the foreign tax credit are complex. Each US Holder is urged to consult its own tax advisor concerning

whether, and to what extent, a foreign tax credit will be available under the Treaty with respect to dividends received from us. Under the Code, dividend payments by us on the shares or ADSs are not eligible for the dividends received deduction generally allowed to corporate shareholders. Any distribution that exceeds our earnings and profits will be treated as a nontaxable return of capital to the extent of the US Holder's tax basis in the shares or ADSs, thus reducing the US Holder's tax basis in such shares or ADSs and, thereafter, as capital gain.

In general, a US Holder will be required to determine the amount of any dividend paid in Swiss francs by translating the Swiss francs into US dollars at the spot rate on the date of receipt. The tax basis of Swiss francs received by a US Holder of shares generally will equal the US dollar equivalent of such Swiss francs at the spot rate on the date such Swiss francs are received. Upon subsequent exchange of such Swiss francs for US dollars, or upon the use of such Swiss francs to purchase property, you will generally recognize exchange gain or loss equal to the difference between your tax basis for the Swiss francs and the US dollars received or, if property is received, the fair value of the property on the date of the exchange.

Under 2003 US tax legislation, some US Holders (including individuals) are eligible for reduced rates of US federal income tax in respect of "qualified dividend income" received in taxable years beginning after December 31, 2002 and beginning before January 1, 2009. For this purpose, qualified dividend income generally includes dividends paid by non-US corporations if, among other things, (i) the shares with respect to which the dividend has been paid are readily tradable on an established securities market in the US, or (ii) the non-US corporation is eligible for the benefits of a comprehensive US income tax treaty (such as the Treaty) which provides for the exchange of information. We currently believe that dividends paid with respect to our shares or ADSs will constitute qualified dividend income for US federal income tax purposes. Some of the eligibility requirements for non-US corporations are not entirely clear, however, and further guidance from the US Internal Revenue Service ("IRS") is anticipated. In addition, the IRS is expected to issue certification procedures for 2004 whereby a non-US corporation will have to certify as to the eligibility of its dividends for the reduced US federal income tax rates.

Sale or Other Disposition. Upon a sale or exchange of shares or ADSs, US Holders generally will recognize capital gain or loss in an amount equal to the difference between the amount realized on the disposition and the US Holder's tax basis in the shares or ADSs. This capital gain or loss will be long-term capital gain or loss if the holding period in the shares or ADSs exceeds one year. The deductibility of capital losses is subject to significant limitations. In the case of certain US Holders (including individuals), any capital gain generally will be subject to US federal income tax at preferential rates if the US Holder meets the specified minimum holding periods. Such gain or loss, if any, generally will

be US source gain or loss.

United States Information Reporting and Backup Withholding. Dividend payments with respect to shares or ADSs and proceeds from the sale, exchange or other disposition of shares or ADSs may be subject to information reporting to the IRS and possible US backup withholding at a current rate of 28%. Certain exempt recipients (such as corporations) are not subject to these information reporting requirements. Backup withholding will not apply, however, to a Holder who furnishes a correct taxpayer identification number or certificate of foreign status and makes any other required certification or who is otherwise exempt from backup withholding. Any US Holders required to establish their exempt status generally must provide IRS Form W-9 (Request for Taxpayer Identification Number and Certification). Non-US holders are generally not subject to US information reporting or backup withholding requirements. However, such holders may be required to provide certification of non-US status in connection with payments received in the United States or through US-related financial intermediaries. Amounts withheld as backup withholding may be credited against a Holder's US federal income tax liability, and a Holder may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS and furnishing any required information.

10.F Dividends and paying agents

Not applicable.

10.G Statement by experts

Not applicable.

10.H Documents on display

Any statement in this Form 20-F about any of our contracts or other documents is not necessarily complete. If the contract or document is filed as an exhibit to the Form 20-F the contract or document is deemed to modify the description contained in this Form 20-F. You must review the exhibits themselves for a complete description of the contract or document.

You may review a copy of our filings with the U.S. Securities and Exchange Commission (the "SEC"), including exhibits and schedules filed with it, at the SEC's public reference facilities in Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information. In addition, the SEC maintains an Internet site at http://www.sec.gov that contains reports and other information regarding issues that file electronically with the SEC. These SEC filings are also available to the public from commercial document retrieval services.

WE ARE REQUIRED TO FILE REPORTS AND OTHER INFORMATION WITH THE SEC UNDER THE SECURITIES EXCHANGE ACT OF 1934. REPORTS AND OTHER INFORMATION FILED BY U.S. WITH THE SEC MAY BE INSPECTED AND COPIED AT THE SEC'S PUBLIC REFERENCE FACILITIES DESCRIBED ABOVE. AS A FOREIGN PRIVATE ISSUER, WE ARE EXEMPT FROM THE RULES UNDER THE EXCHANGE ACT PRESCRIBING THE FURNISHING AND CONTENT OF PROXY STATEMENTS AND OUR OFFICERS, DIRECTORS AND PRINCIPAL SHAREHOLDERS ARE EXEMPT FROM THE REPORTING AND SHORT-SWING PROFIT RECOVERY PROVISIONS CONTAINED IN SECTION 16 OF THE EXCHANGE ACT. UNDER THE EXCHANGE ACT, AS A FOREIGN PRIVATE ISSUER, WE ARE NOT REQUIRED TO PUBLISH FINANCIAL STATEMENTS AS FREQUENTLY OR AS PROMPTLY AS UNITED STATES COMPANIES.

In addition, material filed by us with the SEC can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005 and at the offices of JPMorgan & Chase Bank, as Depositary of our ADR Program, at P.O. Box 842006, Boston, MA 02284 (telephone: 1 -877-816-5333).

10.I Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures about Non-Product-Related Market Risk

$

	Local Currencies	$
2003		
Growth and currency contribution		
Sales	11%	19%
Operating income	1%	16%
Net income	(8%)	6%

	Sales	Costs
2003		
Sales and operating costs by currencies:		
$	43%	41%
Euro	26%	23%
CHF	4%	17%
Yen	8%	4%
Other	19%	15%
	100%	100%

	Liquid Funds	Financial Debt
2003		
Liquid funds and financial debt by currencies:		
$	50%	28%
Euro	15%	29%
CHF	32%	40%
Yen	1%	
Other	2%	3%
	100%	100%

	Local Currencies	$
2002		
Growth and currency contribution		
Sales	11%	11%
Operating income	10%	18%
Net income	15%	23%

	Sales	Costs[1]
2002		
Sales and operating costs by currencies:		
$	43%	41%
Euro	25%	22%
CHF	5%	22%
Yen	8%	4%
Other	19%	11%
	100%	100%

(1) restated to be comparable to 2003

	Liquid funds	Financial debt
2002		
Liquid funds and financial debt by currencies:		
$	8%	31%
Euro	24%	6%
CHF	64%	37%
Yen	1%	20%
Other	3%	6%
	100%	100%

Market Risk

We are exposed to market risk, primarily related to foreign exchange, interest rates and the market value of our investments of liquid funds. We actively monitor these exposures. To manage the volatility relating to these exposures, we enter into a variety of derivative financial instruments. Our 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 our policy and practice to use derivative financial instruments to manage exposures and to enhance the yield on the investment of liquid funds. We do not enter any financial transactions containing a risk that cannot be quantified at the time the transaction is concluded. We only sell existing assets in transactions and future transactions (in the case of anticipatory hedges) which we confidently expect we will have in the future based on past experience. In the case of liquid funds, we write call options on assets we have or we write put options on positions we want to acquire and have the liquidity to acquire. We expect that any loss in value for those instruments generally would be offset by increases in the value of the underlying transactions.

Foreign exchange rates: We use the US dollar as our presentation currency and we are therefore exposed to foreign exchange movements, primarily in European, Japanese and other Asian and Latin American currencies. Consequently, we enter into various contracts which change in value as foreign exchange rates change, to preserve the value of assets, commitments and anticipated transactions. We use forward contracts and foreign currency option contracts to hedge certain anticipated net revenues in foreign currencies.

On December 31, 2003, we had long and short forward exchange and currency option contracts with equivalent values of $7.4 billion and $4 billion, respectively. At December 31, 2002, we had long and short forward exchange and currency option contracts with equivalent values of $8.6 billion and $7.8 billion, respectively.

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 should compensate for the change due to currency movements. For this reason, we only hedge the net investments in foreign subsidiaries in exceptional cases.

Commodities: We have only a very limited exposure to price risk related to anticipated purchases of certain commodities used as raw materials by our 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, we do not enter into significant commodity futures, forward and option contracts to manage fluctuations in prices of anticipated purchases.

Interest rates: We manage our net exposure to interest rate risk through the proportion of fixed rate debt and variable rate debt in our total debt portfolio. To manage this mix, we may enter into interest rate swap agreements, in which we exchange the periodic payments, based on a notional amount and agreed-upon fixed and variable interest rates. Our percentage of fixed rate debt to total financial debt was 51% at December 31, 2003 and 46% at December 31, 2002 and December 31, 2001.

Equity risk: We purchase equities as investments of our liquid funds. As a policy, we limit our holdings in an unrelated company to less than 5% of our liquid funds. Potential investments are thoroughly analyzed in respect of their past financial track record (mainly cash flow return on investment), their market potential, their management and their competitors. Call options are written on equities which we own and put options are written on equities which we want to buy and for which cash has been reserved.

Management summary: Use of derivative financial instruments has not had a material impact on our financial position at December 31, 2003 and 2002 or on the results of our operations for the years ended December 31, 2003 and 2002.

Value at risk: We use a value at risk ("VAR") computation to estimate the potential ten-day loss in the fair value of our interest rate-sensitive financial instruments, the loss in pre-tax earnings of our foreign currency price-sensitive derivative financial instruments, as well as the potential ten-day loss of our equity holdings. We use 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 our debt, short-term and long-term investments, foreign currency forwards, swaps and options and anticipated transactions. Foreign currency trade payables and receivables as well as net investments in foreign subsidiaries are excluded from the computation.

The VAR estimates are made assuming normal market conditions, using a 95% confidence interval. We use 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 our 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 our equity holdings, as calculated in the VAR model, follow:

	At December 31,	
	2003	**2002**
	($ millions)	
Instruments sensitive to foreign currency rates	244	128
Instruments sensitive to equity market movements	67	421
Instruments sensitive to interest rates	112	94
All instruments	356	509

The average, high, and low VAR amounts for 2003 are as follows:

	Average	High	Low
	($ millions)		
Instruments sensitive to foreign currency rates	184	307	74
Instruments sensitive to equity market movements	228	440	67
Instruments sensitive to interest rates	100	118	83
All instruments	404	489	302

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 us, nor does it consider the effect of favorable changes in market rates. We cannot predict actual future movements in such market rates and do 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 our future results of operations or financial position.

In addition to these VAR analyses, we use stress-testing techniques which are aimed at reflecting a worst case scenario. For these calculations, we use the worst movements during a period of six months over the past 20 years in each category. For 2003 and 2002, the worst case loss scenario was configured as follows:

	At December 31,	
	2003	2002
	($ millions)	
Bond portfolio	200	831
Money market and linked financial instruments	118	105
Equities	287	767
Foreign exchange risks	232	339
Total	**837**	**2,042**

In our risk analysis, we consider this worst case scenario acceptable inasmuch as it could reduce the income, but would not endanger our solvency and/or our investment grade credit standing. While it is highly unlikely that all worst case fluctuations would happen simultaneously, as shown in the model, the actual market can, of course, produce bigger movements in the future than it has historically. Additionally, in such a worst case environment management actions could further mitigate our exposure.

Our major financial risks are managed centrally by our Group Treasury. Only residual risks and some currency risks are managed by our affiliates. The collective amount of the residual risks is, however, below 10% of the global risks.

We have a written Treasury Policy, have implemented a strict segregation of front office and back office controls, and we do regular reconciliations of our positions with our counter parties. In addition, internal and external audits of the Treasury function are performed at regular intervals.

Item 12. Description of Securities other than Equity Securities

Not applicable.

Part II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

None.

Item 15. Controls and Procedures

Novartis AG's chief executive officer and chief financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) as of the end of the period covered by this Form 20-F, have concluded that, as of such date, our disclosure controls and procedures were effective to ensure that material information relating to Novartis AG was made known to them by others within the company, particularly during the period in which this Form 20-F was being prepared.

There were no changes to our internal control over financial reporting that occurred during the period covered by this Form 20-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [Reserved]

Item 16A. Audit Committee Financial Expert

Our Board of Directors has determined that a member of our Audit and Compliance Committee, Prof. Ulrich Lehner, PhD, is an audit committee financial expert.

Item 16B. Code of Ethics

In addition to our Code of Conduct, which is applicable to all of our associates, we have adopted a code of ethics that imposes additional obligations on our principal executive officer, principal financial officer, principal accounting officer, and persons performing similar functions. This document is accessible on our Internet website at http://www.novartis.com/annual_reports/2002/en/corp_governance/governance_19.shtml.

Item 16C. Principal Accountant Fees and Services

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

PricewaterhouseCoopers AG our principle independent auditor, began serving as our auditor upon the formation of Novartis in 1996. The head auditors responsible for our audit, Mr. James Kaiser and Mr. Daniel Suter, began serving in their roles in 2002 and 2003, respectively.

Policy on Pre-Approval of Audit and Non-Audit Services of Independent Auditors

Our Audit and Compliance Committee is responsible for the oversight of our independent auditor's work. Our Audit and Compliance Committee's policy is to pre-approve all audit and non-audit services

provided by PricewaterhouseCoopers (PwC). These services may include audit services, audit-related services, tax services and other services, as described below. In such an event, the Audit and Compliance Committee sets forth its pre-approval in detail, listing the particular services or categories of services which are pre-approved, and setting forth a specific budget for such services. In urgent circumstances, the Audit and Compliance Committee's Chair, Prof. Helmut Sihler, JD, PhD, may issue such a pre-approval. Additional services may be pre-approved on an individual basis. PwC and our management then report to the Audit and Compliance Committee on a quarterly basis regarding the extent of services actually provided in accordance with the applicable pre-approval, and regarding the fees for the services performed.

Independent Auditor Fees

We paid the following fees for professional services to PwC, for the 12-month periods ended December 31:

	2003	2002
	($ thousands)	
Audit Services	13,360	10,821
Audit Related Services[1]	6,323	1,140
Tax Services	2,235	6,828
Other Services	2,742	1,916

	2003	2002
Continuing Services	**24,660**	**20,705**
Services divested to IBM/Mellon[2]		23,230
Total	**24,660**	**43,935**

(1) Increase principally due to acquisition related due diligence services.

(2) These cover management and human resources consulting services, which during 2002, were transferred 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 such as auditing of non-recurring transactions and application of new accounting policies, audits of significant and newly implemented system controls, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for US Securities and Exchange Commission or other regulatory filings.

Audit Related Services include those other assurance services provided by 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, audits of pension and benefit plans, contractual audits of third party arrangements, assurance services on corporate citizenship reporting, and consultation regarding new accounting pronouncements.

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

Other Services consist of actuarial services for pension and employee benefit plans. As required by the Sarbanes-Oxley Act, PwC can no longer provide certain of these services after May 2004.

Part III

Item 17. Financial Statements

Not applicable.

Item 18. Financial Statements

The following financial statements are filed as part of this annual report on Form 20-F.

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Item 19. Exhibits

1.1 Articles of Association, as amended March 4, 2003 (in English translation).

1.2 Regulations of the Board and Committee Charters of Novartis AG, as amended April 15, 2003.

2.1 Restricted Issuance Agreement dated as of January 11, 2002 among Novartis AG, J.P. Morgan Chase & Co., as depositary, and all holders from time to time of ADRs issued thereunder (incorporated by reference from the Registration Statement on Form F-3, File No. 333-81862, as filed with the Commission on January 31, 2002).*

4.1 The Leveraged Stock Saving Plan, Plan Summary January 2002.*

4.2 Agreement dated December 20, 2001 between Novartis International AG and Paul Choffat.*

4.3 Agreement dated April 22, 2002 between Novartis Institute for Biomedical Research, Inc. and Mark C. Fishman, MD.

6.1 For Earnings per share calculation, see note 7 to our consolidated financial statements.

8.1 For a list of all of our subsidiaries, see note 31 to our consolidated financial statements.

12.1 Certification of Daniel Vasella, Chairman and Chief Executive Officer of Novartis AG, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

12.2 Certification of Raymund Breu, Chief Financial Officer of Novartis AG, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

13.0 Certification of Daniel Vasella, Chairman and Chief Executive Officer of Novartis AG, and Raymund Breu, Chief Financial Officer of Novartis AG, pursuant to Section 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

14.1 Consent of PricewaterhouseCoopers AG to the incorporation by reference of the audit report contained in this Form 20-F into Novartis AG's Registration Statement on Form F-3 (File No. 333-81862) as filed with the SEC on January 31, 2002, on Form F-3 filed on May 11, 2002 (File No. 333-60712) and on Form S-8 filed on May 14, 2001 (File No. 333-13506).

* Previously filed.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

NOVARTIS AG

By: /s/ RAYMUND BREU

Name: Raymund Breu
Title: *Chief Financial Officer, Novartis Group*

By: /s/ URS BÄRLOCHER

Name: Urs Bärlocher
Title: *Head of Legal and General Affairs, Novartis Group*

Date: January 30, 2004

NOVARTIS GROUP

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Report of Independent Auditors

To the Shareholders and Board of Directors
of the Novartis Group, Basel

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 as of December 31, 2003 and 2002 and for each of the three years in the period ended December 31, 2003, all expressed in US dollars.

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 audits.

Our audits were conducted in accordance with auditing standards promulgated by the Swiss profession and with International Standards on Auditing and auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits

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 audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Novartis Group as of December 31, 2003 and 2002 and the results of operations and the cash flows for each of the three years in the period ended December 31, 2003 in accordance with International Financial Reporting Standards.

As discussed in Note 1 to the consolidated financial statements, the Group began presenting its results in US dollars effective January 1, 2003 and has restated prior periods for comparison purposes.

International Financial Reporting Standards vary in certain respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in Note 32 to the consolidated financial statements.

PricewaterhouseCoopers AG

/s/ J.G. KAISER /s/ D. SUTER

J.G. Kaiser D. Suter
Basel, January 20, 2004

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(for the years ended December 31, 2003, 2002 and 2001)

	Notes	2003	2002	2001
		($ millions)	($ millions)	($ millions)
Sales	3/4	**24,864**	**20,877**	**18,762**
Cost of Goods Sold		(5,894)	(4,994)	(4,744)
Gross profit		**18,970**	**15,883**	**14,018**
Marketing & Sales		(7,854)	(6,737)	(6,060)
Research & Development		(3,756)	(2,843)	(2,528)
General & Administration		(1,471)	(1,211)	(1,105)
Operating income	3/4	**5,889**	**5,092**	**4,325**
Result from associated companies	10	(200)	(7)	83
Financial income, net	5	379	613	284
Income before taxes and minority interests		**6,068**	**5,698**	**4,692**
Taxes	6	(1,008)	(959)	(844)
Income before minority interests		**5,060**	**4,739**	**3,848**
Minority interests		(44)	(14)	(12)
NET INCOME		**5,016**	**4,725**	**3,836**

	Notes	2003	2002	2001
Earnings per share ($)	7	2.03	1.88	1.49
Diluted earnings per share ($)	7	2.00	1.84	1.49

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

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEETS

(at December 31, 2003 and 2002)

	Notes	2003	2002
		($ millions)	($ millions)
ASSETS			
Long-term assets			
Tangible fixed assets	8	7,597	6,321
Intangible assets	9	4,708	4,395
Investments in associated companies	10	6,848	6,483
Deferred taxes	11	2,401	2,178
Financial and other assets	12	5,490	4,833
Total long-term assets		**27,044**	**24,210**
Current assets			
Inventories	13	3,346	2,963
Trade accounts receivable	14	4,376	3,697
Other current assets	15	1,292	1,613
Marketable securities & financial derivatives	16	7,613	6,744
Cash and cash equivalents		5,646	5,798
Total current assets		**22,273**	**20,815**
TOTAL ASSETS		**49,317**	**45,025**
EQUITY AND LIABILITIES			
Equity			
Share capital	17	1,017	1,025
Treasury shares	17	(121)	(127)
Reserves		29,533	27,371
Total equity		**30,429**	**28,269**
Minority interests		**90**	**66**
Liabilities			

	Notes	2003	2002
Long-term liabilities			
Financial debts	18	3,191	2,729
Deferred taxes	11	3,138	2,821
Provisions and other long-term liabilities	19	3,149	2,868
Total long-term liabilities		**9,478**	**8,418**
Short-term liabilities			
Trade accounts payable		1,665	1,266
Financial debts	20	2,779	2,841
Other short-term liabilities	21	4,876	4,165
Total short-term liabilities		**9,320**	**8,272**
Total liabilities		**18,798**	**16,690**
TOTAL EQUITY, MINORITY INTERESTS AND LIABILITIES		**49,317**	**45,025**

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

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED CASH FLOW STATEMENTS

(for the years ended December 31, 2003, 2002 and 2001)

	Notes	2003	2002	2001
		($ millions)	($ millions)	($ millions)
Net income		**5,016**	**4,725**	**3,836**
Reversal of non-cash items				
Minority interests		44	14	12
Taxes		1,008	959	844
Depreciation, amortization and impairment on				
Tangible fixed assets		768	622	575
Intangible assets		515	673	462
Financial assets		103	41	19
Result from associated companies		200	7	(83)
Divestment gains			(133)	(27)
Gains on disposal of tangible and intangible assets		(325)	(260)	(276)
Net financial income		(379)	(613)	(284)
Dividends received		12	14	23
Interest and other financial receipts		501	435	438
Interest and other financial payments		(240)	(174)	(232)
Receipts from associated companies		62	44	2
Taxes paid		(842)	(769)	(816)
Cash flow before working capital and provision changes		**6,443**	**5,585**	**4,493**

	Notes	2003	2002	2001
Restructuring payments and other cash payments out of provisions		(248)	(204)	(250)
Change in net current assets and other operating cash flow items	22	457	(152)	115
Cash flow from operating activities		**6,652**	**5,229**	**4,358**
Investment in tangible fixed assets		(1,329)	(1,068)	(801)
Proceeds from disposals of tangible fixed assets		92	183	163
Purchase of intangible assets		(214)	(90)	(580)
Proceeds from disposals of intangible assets		335	214	175
Purchase of financial assets		(816)	(725)	(828)
Proceeds from disposals of financial assets		632	582	744
Acquisition of additional interests in associated companies		(120)	(1,846)	(3,072)
Acquisition/divestment of subsidiaries	23	(272)	(542)	(101)
Acquisition of minorities		(10)	(2)	(1)
Proceeds from disposals of marketable securities		10,511	7,086	4,865
Payments for acquiring marketable securities		(10,107)	(6,657)	(3,336)
Cash flow used for investing activities		**(1,298)**	**(2,865)**	**(2,772)**
Acquisition of treasury shares		(273)	(3,228)	(2,249)
Proceeds from issue of options on Novartis shares				2,416
Increase in long-term financial debts		18	999	821
Repayment of long-term financial debts		(31)	(18)	(74)
Repayment of put and call options on Novartis shares		(3,458)		
Change in short-term financial debts		(296)	(427)	192
Dividends paid		(1,724)	(1,367)	(1,268)
Cash flow used for financing activities		**(5,764)**	**(4,041)**	**(162)**
Net effect of currency translation on cash and cash equivalents		258	836	(156)
Net change in cash and cash equivalents		**(152)**	**(841)**	**1,268**
Cash and cash equivalents at the beginning of the year		**5,798**	**6,639**	**5,371**
Cash and cash equivalents at end of the year		**5,646**	**5,798**	**6,639**

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

NOVARTIS GROUP CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(for the years ended December 31, 2003, 2002 and 2001)

	Notes	Share premium	Retained earnings	Fair value adjustments on marketable securities not recorded in net income	Fair value of deferred cash flow hedges not recorded in net income	Cumulative translation differences not recorded in net income	Total reserves	Share capital	Treasury shares	Total equity
					($ millions)					
January 1, 2001		**176**	**25,306**	**1,185**	**63**	**(3,937)**	**22,793**	**1,047**	**(101)**	**23,739**

	Notes	Share premium	Retained earnings	Fair value adjustments on marketable securities not recorded in net income	Fair value of deferred cash flow hedges not recorded in net income	Cumulative translation differences not recorded in net income	Total reserves	Share capital	Treasury shares	Total equity
Fair value adjustments on financial instruments	24a			(529)	(73)		(602)			(602)
Associated companies' equity movements	24b		(4)				(4)			(4)
Translation effects						(680)	(680)			(680)
Net income			3,836				3,836			3,836
Total of components of comprehensive income			**3,832**	**(529)**	**(73)**	**(680)**	**2,550**			**2,550**
Dividends	24c		(1,268)				(1,268)			(1,268)
Acquisition of treasury shares	24d		(2,228)				(2,228)		(21)	(2,249)
Issue of call options on Novartis shares	24e	1,848					1,848			1,848
Issue of put options on Novartis shares	24f	541					541			541
Total of other equity movements		**2,389**	**(3,496)**				**(1,107)**		**(21)**	**(1,128)**
December 31, 2001		**2,565**	**25,642**	**656**	**(10)**	**(4,617)**	**24,236**	**1,047**	**(122)**	**25,161**
Fair value adjustments on financial instruments	24a		98	(955)	123		(734)			(734)
Associated companies' equity movements	24b		(74)			(30)	(104)			(104)
Recycled goodwill	24g		25				25			25
Translation effects						3,791	3,791			3,791
Net income			4,725				4,725			4,725
Total of components of comprehensive income			**4,774**	**(955)**	**123**	**3,761**	**7,703**			**7,703**
Dividends	24c		(1,367)				(1,367)			(1,367)
Acquisition of treasury shares	24d		(3,201)				(3,201)		(27)	(3,228)
Reduction in share capital	24h							(22)	22	
Total of other equity movements			**(4,568)**				**(4,568)**	**(22)**	**(5)**	**(4,595)**
December 31, 2002		**2,565**	**25,848**	**(299)**	**113**	**(856)**	**27,371**	**1,025**	**(127)**	**28,269**
Fair value adjustments on financial instruments	24a			332	(106)		226			226
Associated companies' equity movements	24b		(31)	41			10			10
Translation effects						2,363	2,363			2,363
Net income			5,016				5,016			5,016
Total of components of comprehensive income			**4,985**	**373**	**(106)**	**2,363**	**7,615**			**7,615**
Dividends	24c		(1,724)				(1,724)			(1,724)

	Notes	Share premium	Retained earnings	Fair value adjustments on marketable securities not recorded in net income	Fair value of deferred cash flow hedges not recorded in net income	Cumulative translation differences not recorded in net income	Total reserves	Share capital	Treasury shares	Total equity
Acquisition of treasury shares	24d		(271)				(271)		(2)	(273)
Redemption of call options on Novartis shares	24e	(1,848)	92			(435)	(2,191)			(2,191)
Redemption of put options on Novartis shares	24f	(541)	(603)			(123)	(1,267)			(1,267)
Reduction in share capital	24h							(8)	8	
Total of other equity movements		**(2,389)**	**(2,506)**			**(558)**	**(5,453)**	**(8)**	**6**	**(5,455)**
December 31, 2003		**176**	**28,327**	**74**	**7**	**949**	**29,533**	**1,017**	**(121)**	**30,429**

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

NOTES TO THE NOVARTIS GROUP

CONSOLIDATED FINANCIAL STATEMENTS

1. Accounting policies

The Novartis Group (Group or Novartis) consolidated financial statements are prepared in accordance with the historical cost convention except for the revaluation to market value of certain financial assets and liabilities and comply with the International Financial Reporting Standards (IFRS) formulated by the International Accounting Standards Board (IASB) and with International Accounting Standards (IAS) and interpretations formulated by its predecessor organization the International Accounting Standards Committee (IASC), as well as with the following significant accounting policies.

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual outcomes could differ from those estimates.

Scope of consolidation

The 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 IFRS, equity compensation and post-employment plans are not consolidated.

Investments in associated companies (defined generally as 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.

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

Reclassification

Certain prior year balances have been reclassified to conform with the current year presentation.

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 and historical experience. Expenses for research and service contracts in progress are recognized based on their percentage of completion.

Foreign currencies

The consolidated financial statements of Novartis are expressed in US dollars ("$").

The Novartis Group began presenting its results in US dollars with effect from January 1, 2003 and has restated its 2002 and 2001 results in US dollars for comparison purposes. With effect from July 1, 2003, the measurement currency of certain Swiss and foreign finance companies used for preparing the financial statements has been changed to US dollars from the respective local currency. This reflects changes in these entities' cash flows and transactions now being primarily denominated in US dollars. Generally, the local currency is used as the measurement currency for other entities.

In the respective entity financial statements, monetary assets and liabilities denominated in foreign currencies are translated at the rate prevailing at the balance sheet date. Transactions are recorded using the approximate exchange rate at the time of the transaction. All resulting foreign exchange transaction gains and losses are recognized in the subsidiary's income statement.

Income, expense and cash flows of the consolidated companies have been translated into US dollars 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 intercompany financing transactions 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 cash flow 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 are 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 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 Novartis substantially all the risks and rewards of ownership are capitalized at the lower of the fair value of leased property and the present value of minimum lease payments 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.

Intangible assets

Intangible assets are valued at cost and reviewed periodically for any diminution in value. Any resulting impairment loss is recorded in the income statement in General & Administration expenses. 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 General & Administration expenses on a straight-line basis over the asset's 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 retained earnings.

Management determines the estimated useful life of goodwill arising from an acquisition 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 practice 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.

Long-lived tangible fixed assets and identifiable intangibles are reviewed for impairment whenever events or changes in circumstance indicate that the balance sheet carrying amount of the asset may not be recoverable. Goodwill is reviewed for impairment annually. When 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 anticipated 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.

Financial assets

Minority investments other than associated companies and joint ventures are initially recorded at cost and subsequently carried at fair value and debt securities are carried at amortized cost. Exchange rate gains and losses on loans are recorded in the income statement. Originated loans are carried at amortized cost, less any allowances for uncollectable amounts. All other changes in the fair value of financial assets are deferred as a fair value adjustment to 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 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 temporary differences related to investments in subsidiaries and associated companies, where the timing of their reversal can be controlled and it is probable that the difference will not reverse in the foreseeable future. Furthermore, withholding or other taxes on eventual distribution of 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. Any pension asset recognized in 2002 and 2003 does not exceed the present value of any future economic benefits available in the form of refunds from the plan and/or expected reductions in future contributions to the plan from this asset.

(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 & Administration expenses. Releases of accrued amounts are recognized in the period in which it is decided that the amounts will not be required.

Environmental liabilities

Novartis is exposed to environmental liabilities relating to its past operations, principally in respect to remediation costs. Provisions for non-recurring remediation costs are made when expenditure on remedial work is probable and the cost can be estimated. Cost of future expenditures do not reflect any claims or recoveries. The Group records recoveries at such time the amount is reasonably estimable and collection is probable. With regard to recurring remediation costs, the discounted amount of such annual costs for the next 30 years are calculated and recorded in long-term liabilities.

Dividends

Dividends are recorded in the Group's financial statements in the period in which they are approved by the Group's shareholders.

Treasury shares and share split

Treasury shares are deducted from equity at their nominal value of CHF 0.50 per share. Prior to the share split, which became effective on May 7, 2001, the nominal value was CHF 20.00 per share. Differences between this amount and the amount paid for acquiring, or received for disposing of, treasury shares are recorded in retained earnings. Except where indicated, all share related data has been restated to reflect the effect of the share split.

2. Changes in the scope of consolidation

The following significant changes were made during 2003, 2002 and 2001:

Acquisitions 2003

Pharmaceuticals

On May 8, 2003 51% of the capital stock of Idenix Pharmaceuticals Inc., Cambridge, Massachusetts was acquired for an initial payment of $255 million in cash to its existing shareholders. As part of the acquisition, Novartis agreed to pay additional amounts to the shareholders of Idenix Pharmaceuticals Inc. based on the achievement of clinical and regulatory milestones, marketing approvals and sales targets. The total additional value of these milestone payments is up to $357 million. Novartis cannot estimate when or if these additional milestone payments will

be made. In total the Group owns 54% of the capital stock of this company. This company, which expands the Group's presence in the infectious disease

therapeutic area, is included in the consolidated financial statements from May 2003. Since net liabilities were also assumed, total goodwill amounted to $297 million on this transaction which is being amortized over 15 years.

Corporate

In 2003, the Group increased its investment in Roche Holding AG to 33.3% (just under one third) at December 31, 2003 from 32.7% at December 31, 2002 by acquiring further voting shares for $120 million. At December 31, 2003 the Group's holding represents approximately 6.3% of Roche Holding AG's total shares and equity instruments.

Acquisitions 2002

Sandoz

On November 29, 2002 the Business Unit acquired 99% of Lek d.d., Ljubljana, Slovenia for $0.9 billion in cash. The acquisition was accounted for under the purchase method of accounting. A provisional balance sheet at December 31, 2002 was consolidated, however due to its immateriality, no post-acquisition income statement or cash flow was consolidated in 2002. During 2003 all the outstanding minority interests were acquired. In 2003, the initial assessment of goodwill resulting from the 2002 acquisition of Lek d.d., was finalized upon completion of a third-party valuation. As a result, the total goodwill initially recorded in 2002 of $535 million was reduced by $425 million through an allocation to the identifiable net assets acquired. The remaining goodwill balance of $110 million 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 purchase price is a minimum of $99 million of which $78 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 $83 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 $1.8 billion by acquiring a further 11.4% of this company's voting shares. In total 32.7% of the Roche Holding AG voting shares were held at December 31, 2002 which represented approximately 6.2% of Roche Holding AG's total shares and equity securities.

Acquisitions 2001

Sandoz

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 $40 million in cash. No financial debts were acquired. The acquisition was accounted for under the purchase method of accounting and the related goodwill was $31 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 $72 million in cash and the assumption of $33 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was $73 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 $68 million in cash and the assumption of $8 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was $55 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 $19 million in cash and the assumption of $20 million of debt. The acquisition was accounted for under the purchase method of accounting and the related goodwill was $31 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 $3.1 billion. This represents approximately 4% of the total shares and equity securities of Roche Holding AG and is accounted for using the equity method of accounting. The related goodwill was $743 million which is being amortized on a straight-line basis over 20 years.

Divestments 2003

There were no significant divestments during 2003.

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 $270 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 $209 million and $8 million, respectively. This transaction produced a divestment gain of $132 million which was recorded as a reduction to General & Administration expenses.

Divestments 2001

There were no significant divestments during 2001.

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3. Division and Business Unit breakdown of key figures 2003, 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 best described as follows:

The Pharmaceuticals Division researches, develops, manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular, oncology and hematology; metabolism and endocrinology; central nervous system; dermatology; ophthalmics; respiratory; rheumatology; bone and hormone replacement therapy, transplantation and infectious diseases. 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 Sandoz Business Unit manufactures, distributes and sells generic pharmaceutical products and substances no longer subject to patent protection.

The Over-The-Counter (OTC) Business Unit manufactures, distributes and sells a variety of over-the-counter self medications.

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 in 2002 to reflect management and organizational charges. 2001 figures and presentation have been restated.

Corporate

Income and expenses relating to Corporate include the costs of the Group headquarters and those of corporate coordination functions in major countries. In addition, Corporate includes certain items of income and expense which are not 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 IFRS 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.

			Consumer Health Business Units									
2003	**Pharmaceuticals Division**	**Consumer Health Division**	**Sandoz**	**OTC**	**Animal Health**	**Medical Nutrition**	**Infant & Baby**	**CIBA Vision**	**Divisional Management**	**Divisional eliminations**	**Corporate**	**Total**
						($ millions except employees)						
Sales to third parties	**16,020**	**8,844**	**2,906**	**1,772**	**682**	**815**	**1,361**	**1,308**				**24,864**
Sales to other Division/Business Units	133	98	139	14		1		8		(64)	(231)	
Sales of Divisions/Business Units	**16,153**	**8,942**	**3,045**	**1,786**	**682**	**816**	**1,361**	**1,316**		**(64)**	**(231)**	**24,864**

			Consumer Health Business Units									
Cost of Goods Sold	(2,360)	(3,768)									234	(5,894)
Gross profit	**13,793**	**5,174**									**3**	**18,970**
Marketing & Sales	(5,322)	(2,532)										(7,854)
Research & Development	(3,079)	(529)									(148)	(3,756)
General & Administration	(969)	(793)									291	(1,471)
Operating income	**4,423**	**1,320**	**473**	**309**	**88**	**82**	**254**	**153**	**(29)**	**(10)**	**146**	**5,889**
Result from associated companies	136	3	3								(339)	(200)
Financial income, net												379
Income before taxes and minority interests												**6,068**
Taxes												(1,008)
Income before minority interests												**5,060**
Minority interests												(44)
Net income												**5,016**
Included in operating income are:												
Depreciation of tangible fixed assets	(424)	(285)	(143)	(23)	(10)	(12)	(30)	(67)			(28)	(737)
Amortization of intangible assets	(187)	(220)	(99)	(18)	(19)	(6)	(23)	(55)			(3)	(410)
Impairment charges on tangible and intangible assets	(38)	(98)	(72)			(4)		(22)				(136)
Royalties												
Income	58	8	1	4				3				66
Expense	(256)	(20)	(8)	(6)	(1)			(5)				(276)
Total assets	**13,836**	**9,689**	**4,321**	**1,032**	**660**	**468**	**1,684**	**1,573**		**(49)**	**25,792**	**49,317**
Liabilities	(4,867)	(2,962)	(950)	(434)	(154)	(211)	(880)	(340)	(32)	39	(10,969)	(18,798)
Total equity and minority interests	**8,969**	**6,727**	**3,371**	**598**	**506**	**257**	**804**	**1,233**	**(32)**	**(10)**	**14,823**	**30,519**
Less net liquidity											(7,289)	(7,289)
Net operating assets	**8,969**	**6,727**	**3,371**	**598**	**506**	**257**	**804**	**1,233**	**(32)**	**(10)**	**7,534**	**23,230**
Included in total assets are:												
Total tangible fixed assets	4,828	2,434	1,532	161	79	98	242	322			335	7,597
	771	530	388	20	13	11	29	69			28	1,329

			Consumer Health Business Units									
Additions to tangible fixed assets												
Additions to intangible assets	359	186	82	19	2	33	39	11				545
Total investments in associated companies	1,120	23	23								5,705	6,848
Employees at year end (unaudited)	**44,640**	**32,464**	**12,918**	**3,920**	**2,193**	**2,849**	**4,829**	**5,717**	**38**		**1,437**	**78,541**

			Consumer Health Business Units									
2002	**Pharmaceuticals Division**	**Consumer Health Division**	**Sandoz**	**OTC**	**Animal Health**	**Medical Nutrition**	**Infant & Baby**	**CIBA Vision**	**Divested Health & Functional Food activities**	**Divisional eliminations**	**Corporate**	**Total**
						($ millions except employees)						
Sales to third parties	**13,528**	**7,349**	**1,817**	**1,521**	**623**	**711**	**1,333**	**1,135**	**209**			**20,877**
Sales to other Division/Business Units	111	104	130	12		8		8		(54)	(215)	
Sales of Divisions/Business Units	**13,639**	**7,453**	**1,947**	**1,533**	**623**	**719**	**1,333**	**1,143**	**209**	**(54)**	**(215)**	**20,877**
Cost of Goods Sold	(2,017)	(3,200)									223	(4,994)
Gross profit	**11,622**	**4,253**									**8**	**15,883**
Marketing & Sales	(4,574)	(2,163)										(6,737)
Research & Development	(2,355)	(378)									(110)	(2,843)
General & Administration	(802)	(626)									217	(1,211)
Operating income	**3,891**	**1,086**	**265**	**240**	**92**	**4**	**227**	**118**	**140**		**115**	**5,092**
Result from associated companies	109	1	1								(117)	(7)
Financial income, net												613
Income before taxes and minority interests												**5,698**
Taxes												(959)
Income before minority interests												4,739
Minority interests												(14)
Net income												**4,725**

			Consumer Health Business Units									
Included in operating income are:												
Depreciation of tangible fixed assets	(351)	(222)	(83)	(21)	(9)	(20)	(24)	(65)			(19)	(592)
Amortization of intangible assets	(184)	(165)	(51)	(12)	(16)	(5)	(25)	(56)			(6)	(355)
Impairment charges on tangible and intangible assets	(279)	(63)	(14)				(27)	(4)	(18)		(6)	(348)
Restructuring charges		(58)		(10)		(28)			(20)			(58)
Divestment gain on selling subsidiaries	1	132							132			133
Royalties												
Income	60	5	1	1				3				65
Expense	(197)	(14)	(1)	(3)	(1)			(9)				(211)
Total assets	**11,942**	**8,419**	**3,329**	**902**	**603**	**385**	**1,620**	**1,626**		**(46)**	**24,664**	**45,025**
Liabilities	(3,901)	(2,625)	(781)	(331)	(139)	(243)	(871)	(306)		46	(10,164)	(16,690)
Total equity and minority interests	**8,041**	**5,794**	**2,548**	**571**	**464**	**142**	**749**	**1,320**			**14,500**	**28,335**
Less net liquidity											(6,972)	(6,972)
Net operating assets	**8,041**	**5,794**	**2,548**	**571**	**464**	**142**	**749**	**1,320**			**7,528**	**21,363**
Included in total assets are:												
Total tangible fixed assets	3,984	1,877	990	169	71	93	233	321			460	6,321
Additions to tangible fixed assets	505	361	214	24	10	29	44	40			202	1,068
Additions to intangible assets	2	684	558	25	96			5			18	704
Total investments in associated companies	1,000	18	18								5,465	6,483
Employees at year end (unaudited)	**44,110**	**27,552**	**7,932**	**3,797**	**2,218**	**2,701**	**4,901**	**6,003**			**1,215**	**72,877**

			Consumer Health Business Units									
2001	**Pharmaceuticals Division**	**Consumer Health Division**	**Sandoz**	**OTC**	**Animal Health**	**Medical Nutrition**	**Infant & Baby**	**CIBA Vision**	**Divested Health & Functional Food activities**	**Divisional eliminations**	**Corporate**	**Total**
						($ millions except employees)						
Sales to third parties	**11,965**	**6,797**	**1,444**	**1,507**	**570**	**661**	**1,319**	**1,059**	**237**			**18,762**
	137	103	120	16	9	2		10		(54)	(240)	

			Consumer Health Business Units									
Sales to other Division/Business Units												
Sales of Divisions/Business Units	**12,102**	**6,900**	**1,564**	**1,523**	**579**	**663**	**1,319**	**1,069**	**237**	**(54)**	**(240)**	**18,762**
Cost of Goods Sold	(1,918)	(3,052)									226	(4,744)
Gross profit	**10,184**	**3,848**									**(14)**	**14,018**
Marketing & Sales	(4,016)	(2,044)										(6,060)
Research & Development	(2,088)	(321)									(119)	(2,528)
General & Administration	(703)	(588)									186	(1,105)
Operating income	**3,377**	**895**	**166**	**268**	**82**	**51**	**230**	**102**	**(4)**		**53**	**4,325**
Result from associated companies	112	(7)	1			(8)					(22)	83
Financial income, net												284
Income before taxes and minority interests												**4,692**
Taxes												(844)
Income before minority interests												**3,848**
Minority interests												(12)
Net income												**3,836**
Included in operating income are:												
Depreciation of tangible fixed assets	(343)	(203)	(75)	(20)	(8)	(19)	(24)	(57)			(11)	(557)
Amortization of intangible assets	(181)	(147)	(51)	(12)	(9)	(4)	(11)	(60)			(6)	(334)
Impairment charges on tangible and intangible assets	(143)	(3)		(1)		(1)	(1)					(146)
Restructuring charges		(13)				(13)						(13)
Divestment gain on selling subsidiaries											27	27
Royalties												
Income		8		7		1						3
Expense	(164)	(15)		(13)		(2)						(179)
Total assets	**11,096**	**6,946**	**2,002**	**825**	**438**	**365**	**1,479**	**1,733**	**122**	**(18)**	**21,720**	**39,762**
Liabilities	(3,268)	(2,161)	(441)	(309)	(97)	(120)	(799)	(357)	(56)	18	(9,110)	(14,539)
Total equity and minority interests	**7,828**	**4,785**	**1,561**	**516**	**341**	**245**	**680**	**1,376**	**66**		**12,610**	**25,223**

			Consumer Health Business Units								
Less net liquidity										(8,026)	(8,026)
Net operating assets	**7,828**	**4,785**	**1,561**	**516**	**341**	**245**	**680**	**1,376**	**66**	**4,584**	**17,197**
Included in total assets are:											
Total tangible fixed assets	3,512	1,564	644	157	43	84	230	345	61	320	5,396
Additions to tangible fixed assets	366	303	124	13	11	10	50	91	4	132	801
Additions to intangible assets	105	291	248	4	1	3	12	23		16	412
Total investments in associated companies	926	4	4	0						3,069	3,999
Employees at year end (unaudited)	**41,256**	**28,848**	**7,230**	**3,613**	**1,997**	**2,910**	**5,261**	**6,797**	**1,040**	**1,012**	**71,116**

4. Regional breakdown of key figures 2003, 2002 and 2001

2003	**Europe**	**The Americas**	**Asia/Africa/ Australia**	**Total**
		($ millions except employees)		
Sales[1]	**8,788**	**12,036**	**4,040**	**24,864**
Operating income[2]	**4,505**	**897**	**487**	**5,889**
Depreciation of tangible fixed assets included in operating income	480	220	37	737
Net operating assets[3]	**16,271**	**5,984**	**975**	**23,230**
Additions to tangible fixed assets included in net operating assets	846	427	56	1,329
Additions to intangible assets	120	424	1	545
Personnel costs	3,002	2,759	491	6,252
Employees at year end (unaudited)	**37,510**	**28,608**	**12,423**	**78,541**

2002	**Europe**	**The Americas**	**Asia/Africa/ Australia**	**Total**
		($ millions except employees)		
Sales[1]	**6,832**	**10,558**	**3,487**	**20,877**
Operating income[2]	**3,825**	**958**	**309**	**5,092**
Depreciation of tangible fixed assets included in operating income	355	198	39	592
Net operating assets[3]	**14,086**	**6,312**	**965**	**21,363**
Additions to tangible fixed assets included in net operating assets	498	537	33	1,068
Additions to intangible assets	565	126	13	704
Personnel costs	2,279	2,408	441	5,128
Employees at year end (unaudited)	**32,595**	**28,328**	**11,954**	**72,877**

2001	**Europe**	**The**	**Asia/Africa/**	**Total**

		Americas	Australia	
		($ millions except employees)		
Sales[1]	**5,992**	**9,666**	**3,104**	**18,762**
Operating income[2]	**2,663**	**1,327**	**335**	**4,325**
Depreciation of tangible fixed assets included in operating income	333	184	40	557
Net operating assets[3]	**10,168**	**6,084**	**945**	**17,197**
Additions to tangible fixed assets included in net operating assets	332	429	40	801
Additions to intangible assets	143	261	8	412
Personnel costs	1,855	2,091	418	4,364
Employees at year end (unaudited)	**31,386**	**27,303**	**12,427**	**71,116**

(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.

The following countries accounted for more than 5% of at least one of the respective Group totals as at, or for the years ended, December 31, 2003, 2002 and 2001:

(in $ millions)

	Sales[1]						Investment in tangible fixed assets						Net operating assets[2]					
Country	**2003**	**%**	**2002**	**%**	**2001**	**%**	**2003**	**%**	**2002**	**%**	**2001**	**%**	**2003**	**%**	**2002**	**%**	**2001**	**%**
Switzerland	319	1	317	2	296	2	177	13	124	12	95	12	10,631	46	9,238	43	6,282	37
USA	10,280	41	8,907	43	7,997	43	388	29	511	48	388	49	6,149	26	6,056	28	5,496	32
Japan	2,065	8	1,701	8	1,518	8	14	1	5		8	1	857	4	617	3	589	3
Germany	1,479	6	1,226	6	1,172	6	39	3	45	4	32	4	30		173	1	117	1
France	1,423	6	1,100	5	947	5	17	1	18	2	47	6	690	3	644	3	552	3
UK	789	3	680	3	625	3	194	15	79	7	36	4	1,008	4	863	4	843	5
Austria	252	1	212	1	159	1	170	13	131	12	64	8	946	4	613	3	479	3
Other	8,257	34	6,734	32	6,048	32	330	25	155	15	131	16	2,919	13	3,159	15	2,839	16
Total Group	**24,864**	**100**	**20,877**	**100**	**18,762**	**100**	**1,329**	**100**	**1,068**	**100**	**801**	**100**	**23,230**	**100**	**21,363**	**100**	**17,197**	**100**

(1) Sales by location of third party customer.

(2) 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

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Interest income	323	416	379
Dividend income	17	68	25
Capital gains	11		336
Income on options and forward contracts	1,113	1,659	942
Other financial income	9	3	
Financial income	**1,473**	**2,146**	**1,682**
Interest expense	(243)	(194)	(218)
Capital losses		(79)	
Impairment of marketable securities	(66)		
Expenses on options and forward contracts	(809)	(1,261)	(1,017)
Other financial expense	(40)	(68)	(86)
Financial expense	**(1,158)**	**(1,602)**	**(1,321)**
Currency result, net	**64**	**69**	**(77)**
Total financial income, net	**379**	**613**	**284**

2003 interest income includes a total of $9 million (2002: $19 million; 2001: $19 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:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Switzerland	2,809	2,491	1,969
Foreign	3,259	3,207	2,723
Total income before taxes and minority interests	**6,068**	**5,698**	**4,692**

Current and deferred income tax expense:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Switzerland	(330)	(273)	(161)
Foreign	(765)	(476)	(596)

	2003	2002	2001
Total current income tax expense	**(1,095)**	**(749)**	**(757)**
Switzerland	(9)	(46)	(154)
Foreign	177	(152)	101
Total deferred tax income/(expense)	**168**	**(198)**	**(53)**
Share of tax of associated companies	(81)	(12)	(34)
Total income tax expense	**(1,008)**	**(959)**	**(844)**

The gross value of unused tax loss carryforwards which have, or have not, been capitalized as deferred tax assets, with their expiry dates is as follows:

	Not capitalized	2003 Capitalized	Total	Not capitalized	2002 Capitalized	Total
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
One year	8	17	25	15	16	31
Two years	4	20	24	2	6	8
Three years	9	42	51	6	6	12
Four years	73	29	102	11	3	14
Five years	45	7	52	149	49	198
More than five years	881	109	990	660	226	886
Total	**1,020**	**224**	**1,244**	**843**	**306**	**1,149**

Tax losses are capitalized if it is probable that future taxable profits will arise to utilize the losses. $33 million of unused operating tax loss carryforwards expired during 2003 (2002: $2 million; 2001: $1 million).

Analysis of tax rate

The main elements contributing to the difference between the Group's overall expected tax rate (the weighted average tax rate based on the income before tax of each subsidiary) and the effective tax rate are:

	2003	2002	2001
	%	%	%
Expected tax rate	14.8	15.3	18.6
Effect of taxes of associated companies	1.9	0.3	0.4
Effect of disallowed expenditures	2.3	2.4	3.3
Effect of utilization of tax losses brought forward from prior periods	(0.6)	(0.5)	(0.3)
Effect of income taxed at reduced rates	(2.0)	(1.3)	(1.0)
Effect of tax credits and allowances	(1.4)	(1.0)	(0.8)
Effect of write-off of deferred tax assets	0.5	0.6	

	2003	2002	2001
Prior year and other items	1.1	1.0	(2.2)
Effective tax rate	**16.6**	**16.8**	**18.0**

The utilization of tax loss carry forwards lowered the tax charge by $34 million, $26 million, and $13 million in 2003, 2002 and 2001, respectively.

7. Earnings per share (EPS)

Basic earnings per share

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.

	2003	2002	2001
Net income ($ millions)	5,016	4,725	3,836
Weighted average number of shares outstanding	2,473,522,565	2,515,311,685	2,571,673,365
Basic earnings per share ($)	**2.03**	**1.88**	**1.49**

Diluted earnings per share

For the diluted earnings per share the weighted average number of shares outstanding is adjusted to assume conversion of all potential dilutive shares. Until it matured in 2002, the Group's convertible debt represented a potential dilution in the earnings per share to the extent that it was 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 options on Novartis shares. Net income is adjusted to eliminate the applicable convertible debt interest expense less the tax effect. Share equivalents of 16.4 million

(2002: 16.2 million; 2001: 12.2 million) were excluded from the calculation of diluted earnings per share as they were anti-dilutive.

	2003	2002	2001
Net income ($ millions)	5,016	4,725	3,836
Elimination of interest expense on convertible debt (net of tax effect)		2	2
Net income used to determine diluted earnings per share	5,016	4,727	3,838
Weighted average number of shares outstanding	2,473,522,565	2,515,311,685	2,571,673,365
Adjustment for assumed conversion of convertible debt			1,507,027
Call options on Novartis shares	27,446,092	54,891,036	4,574,401
Adjustment for dilutive share options	4,346,940	2,264,236	1,010,963
Weighted average number of shares for diluted earnings per share	2,505,315,597	2,572,466,957	2,578,765,756

	2003	2002	2001
Diluted earnings per share ($)	**2.00**	**1.84**	**1.49**

8. Tangible fixed asset movements

	Land	Buildings	Machinery	Plant under Construction and other equipment	2003	2002
			(in $ millions)			
Cost						
January 1	**305**	**4,564**	**6,970**	**831**	**12,670**	**10,643**
Consolidation changes						342
Reclassifications[1]	16	(23)	(232)	2	(237)	
Additions	26	285	617	401	1,329	1,068
Disposals	(12)	(65)	(200)	(7)	(284)	(520)
Translation effects	32	486	754	143	1,415	1,137
December 31	**367**	**5,247**	**7,909**	**1,370**	**14,893**	**12,670**
Accumulated depreciation						
January 1	**(1)**	**(2,178)**	**(4,170)**		**(6,349)**	**(5,247)**
Consolidation changes						(237)
Reclassifications[1]		54	280		334	
Depreciation charge		(172)	(565)		(737)	(592)
Depreciation on disposals		11	177		188	381
Impairment charge		(13)	(18)		(31)	(30)
Translation effects		(246)	(455)		(701)	(624)
December 31	**(1)**	**(2,544)**	**(4,751)**		**(7,296)**	**(6,349)**
Net book value December 31	**366**	**2,703**	**3,158**	**1,370**	**7,597**	**6,321**
Insured value December 31					**17,439**	**15,337**
Net book value of tangible fixed assets under finance lease contracts					**135**	**151**

(1) Reclassifications between various categories as a result of recording final acquisition balance sheets.

At December 31, 2003 commitments for purchases of tangible fixed assets totaled $123 million (2002: $69 million).

9. Intangible asset movements

	Goodwill	Product and marketing rights	Trademarks	Software	Other intangibles	2003	2002
			(in $ millions)				
Cost							
January 1	**2,327**	**2,806**	**367**	**88**	**556**	**6,144**	**4,759**
Consolidation changes							354
Reclassifications[1]	(425)	400		7	(3)	(21)	
Additions	303	75	67	25	75	545	704
Disposals	(254)	(13)	(1)	(6)	(42)	(316)	(28)
Translation effects	146	310	8	8	29	501	355
December 31	**2,097**	**3,578**	**441**	**122**	**615**	**6,853**	**6,144**
Accumulated amortization							
January 1	**(623)**	**(684)**	**(115)**	**(78)**	**(249)**	**(1,749)**	**(859)**
Consolidation changes							(139)
Reclassifications[1]	2		(4)	(6)	6	(2)	
Amortization charge	(102)	(223)	(31)	(11)	(43)	(410)	(355)
Disposals	236	7		5	23	271	28
Impairment charge	(85)	(3)			(17)	(105)	(318)
Translation effects	(48)	(78)	(3)	(6)	(15)	(150)	(106)
December 31	**(620)**	**(981)**	**(153)**	**(96)**	**(295)**	**(2,145)**	**(1,749)**
Net book value December 31	**1,477**	**2,597**	**288**	**26**	**320**	**4,708**	**4,395**

(1) Reclassifications between various asset categories as a result of recording final acquisition balance sheets.

In 2003, impairment charges of $105 million were recorded, principally relating to the over valuation on an economic basis of the Sandoz activities in Germany; the divestment of Genetic Therapy Inc., US, a Pharmaceuticals Division research activity, to Cell Genesys Inc., US, and adjustments to CIBA Vision Business Unit intangibles.

In 2002, impairment charges were recorded of $318 million, of which $238 million was for goodwill mainly relating to the Pharmaceutical Division research and biotechnology activities of Genetic Therapy Inc., Systemix Inc., Imutran Ltd., due to changes in the research and development strategy and also relating to the Medical Nutrition and OTC Business Units. There was also an impairment charge of $52 million on the pitavastatin rights (2001: $128 million) and $28 million of other impairments.

10. Investment in associated companies

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

	Balance sheet value		Pre-tax Income statement effect		
	2003	2002	2003	2002	2001
			($ millions)		
Roche Holding AG, Switzerland	5,662	5,462	(354)	(116)	(23)
Chiron Corporation, USA	1,118	996	134	107	110
Others	68	25	20	2	(4)
Total	**6,848**	**6,483**	**(200)**	**(7)**	**83**

The accounting standards of the Group's associated companies are adjusted to IFRS in cases where IFRS is not already used.

Due to the various estimates that have been made in applying the equity method accounting treatment for Roche Holding AG ("Roche") 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 voting shares has been increased during 2003 from 32.7% at December 31, 2002 to 33.3% (just under one third) at December 31, 2003. This investment represents 6.3% 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 were made on publicly available information at the time of acquisition of the shares.

The purchase price allocation is as follows:

	2003
	($ millions)
Identified intangible assets	3,776
Other net liabilities	58
Residual goodwill	2,733
Total purchase price	**6,567**
Net income effect	(398)
Other accumulated equity adjustments	(507)
December 31, balance sheet value	**5,662**

The purchase price 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 2003, 2002 and 2001 is as follows:

	2003	2002	2001

		($ millions)	
Depreciation and amortization of fair value adjustments to			
tangible and intangible assets	(143)	(129)	(92)
goodwill	(127)	(91)	(34)
Prior year adjustment	(269)	(17)	
Novartis share of estimated Roche current year consolidated pre-tax income	185	121	103
Pre-tax income statement effect	**(354)**	**(116)**	**(23)**
Deferred tax	(44)	23	7
Net income effect	**(398)**	**(93)**	**(16)**

The prior year adjustment in 2003 relates to the Novartis share of an unexpected Roche loss in 2002, announced by Roche after the publication of the Novartis 2002 Annual Report.

The market value of the Novartis interest in Roche at December 31, 2003 was $7.3 billion (Reuters symbol: RO.S).

Chiron Corporation

The recording of the results of the strategic interest in Chiron 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 research and development arising on Chiron's acquisitions which are written off by Chiron in the year of acquisition). The effective shareholding of Novartis in Chiron was 42.3% at December 31, 2003 and had a market value of $4.5 billion (NASDAQ symbol: CHIR).

11. Deferred taxes

	2003	2002
	($ millions)	($ millions)
Assets associated with employee benefit liabilities	481	281
net operating loss carryforwards	222	216
inve ntories	957	920
inta ngible assets	60	57
othe r provisions and accruals	867	849
Less: valuation allowance	(186)	(145)
Deferred tax assets less valuation allowance	**2,401**	**2,178**
Liabilities associated with tangible fixed asset depreciation	644	567
prepaid pensions	983	899
other provisions and accruals	1,306	1,150
inventories	205	205
Total liabilities	**3,138**	**2,821**
Net deferred tax liability	**737**	**643**

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

At December 31, 2003, unremitted earnings of $27 billion (2002: $25 billion) have been retained by subsidiary companies for reinvestment. No provision is made for income taxes that would be payable upon the distribution of such earnings. If the earnings were remitted, an income tax charge could result based on the tax statutes currently in effect.

	2003	2002
	($ millions)	($ millions)
Temporary differences on which no deferred tax has been provided as they are permanent in nature:		
write-down of investments in subsidiaries.	775	1,437
goodwill from acquisitions	995	1,422

12. Financial and other assets

	2003	2002
	($ millions)	($ millions)
Other investments and long-term loans	1,514	1,306
Prepaid pension	3,976	3,527
Total	**5,490**	**4,833**

Other investments are valued at market value.

During 2003, $80 million (2002: $64 million; 2001: $12 million) of unrealized losses on investments were considered to be other than temporary and were charged to the income statement.

13. Inventories

	2003	2002
	($ millions)	($ millions)
Raw material, consumables	531	498
Finished products	2,815	2,465
Total inventories	**3,346**	**2,963**

At December 31, 2003, 2002 and 2001 inventory write-downs of $238 million, $252 million and $219 million respectively were deducted in arriving at the inventory values.

14. Trade accounts receivable

	2003	2002
	($ millions)	($ millions)
Total	4,603	3,915
Provision for doubtful receivables	(227)	(218)

	2003	2002
Total trade accounts receivable, net	**4,376**	**3,697**

15. Other current assets

	2003	2002
	($ millions)	($ millions)
Withholding tax recoverable	257	150
Gerber Life insurance receivables	149	207
Prepaid expenses third parties	183	327
associated companies	5	1
Other receivables third party	688	921
associated companies	10	7
Total other current assets	**1,292**	**1,613**

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 US dollar as its reporting currency and is therefore exposed to foreign exchange movements, primarily in 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 within the Group's risk management tolerance level. 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, 2003 and 2002 or the Group's results of operations for the years ended December 31, 2003, 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 minimized by only buying securities which are at least AA rated. Settlement and credit risk is reduced by the policy of entering into transactions with counterparties that are usually at least AA rated banks or financial institutions. Exposure to these risks is closely monitored and kept within predetermined parameters.

The Group does not expect any losses from non-performance by these counterparties and does not have any significant grouping of exposures to financial sector or country risk.

Derivative financial instruments

The following tables show the contract or underlying principal amounts and fair values of derivative financial instruments analyzed by type of contract at December 31, 2003 and 2002. 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, 2003 and 2002.

	Contract or underlying principal amount		Positive fair values		Negative fair values	
Derivative financial instruments	**2003**	**2002**	**2003**	**2002**	**2003**	**2002**
			(in $ millions)			
Currency related instruments						
Forward foreign exchange rate contracts	5,470	6,184	360	217	(398)	(171)
Over the counter currency options	4,016	6,561	34	28	(29)	(130)
Cross currency swaps	1,123	1,973	223	30		
Total of currency related instruments	**10,609**	**14,718**	**617**	**275**	**(427)**	**(301)**
Interest related instruments						
Interest rate swaps	3,826	2,986	12	50	(10)	(1)
Forward rate agreements	6,194	2,743	2		(3)	(7)
Interest rate options	520	677		1	(1)	(5)
Total of interest rate related instruments	**10,540**	**6,406**	**14**	**51**	**(14)**	**(13)**
Options on equity securities	**1,242**	**2,084**	**68**	**106**	**(58)**	**(96)**
Total derivative financial instruments included in marketable securities and in short-term financial debt	**22,391**	**23,208**	**699**	**432**	**(499)**	**(410)**

Currency related instruments included in other current assets and liabilities	Contract or underlying principal amount		Positive fair values		Negative fair values	
Forward foreign exchange rate contracts	1,946	2,399	23	141	(34)	
Over the counter currency options	2	1,192		7		(1)
Total currency related instruments included in other current assets and liabilities	**1,948**	**3,591**	**23**	**148**	**(34)**	**(1)**
Total derivative financial instruments	**24,339**	**26,799**	**722**	**580**	**(533)**	**(411)**

The contract or underlying principal amount of derivative financial instruments at December 31, 2003 and 2002 are set forth by currency in the table below.

	CHF	EUR	$	JPY	Other currencies	Total 2003	Total 2002
				(in $ millions)			
Currency related instruments							
Forward foreign exchange rate contracts	41	3,207	2,885	930	353	7,416	8,583
Over the counter currency options		1,871	1,335	280	532	4,018	7,753
Cross currency swaps		1,123				1,123	1,973
Currency related derivatives	**41**	**6,201**	**4,220**	**1,210**	**885**	**12,557**	**18,309**
Interest rate related instruments							
Interest rate swaps	1,080	1,746	1,000			3,826	2,986
Forward rate agreements		2,994	3,200			6,194	2,743
Interest rate options	120		400			520	677
Interest rate related derivatives	**1,200**	**4,740**	**4,600**			**10,540**	**6,406**
Options on equity securities		**411**	**639**	**144**	**48**	**1,242**	**2,084**
Total derivative financial instruments	**1,241**	**11,352**	**9,459**	**1,354**	**933**	**24,339**	**26,799**

Derivative financial instruments effective for hedge accounting purposes

	Contract or underlying principal amount		Fair values	
	2003	2002	2003	2002
		(in $ millions)		
Anticipated transaction cash flow hedges				
Forward foreign exchange rate contracts	3,167	2,982	25	159
Over the counter currency options	2	1,193		7

	Contract or underlying principal amount		Fair values	
Total of derivative financial instruments effective for hedge accounting purposes	**3,169**	**4,175**	**25**	**166**

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 2004.

Marketable securities, time deposits and derivative financial instruments

	2003	2002
	($ millions)	($ millions)
Available-for-sale marketable securities		
Equity securities	1,277	1,256
Debt securities	4,857	4,240
Total available-for-sale marketable securities	**6,134**	**5,496**
Time deposits longer than 90 days	651	767
Derivative financial instruments	699	353
Accrued interest on derivative financial instruments	42	38
Accrued interest on debt securities	87	90
Total marketable securities, time deposits and derivative financial instruments	**7,613**	**6,744**

During 2003, unrealized losses of $66 million on available-for-sale marketable securities were considered to be other than temporary and charged to the income statement (2002: nil; 2001: $48 million).

17. Details of share capital movements

	Number of shares[1]				
	December 31, 2001	Movement in year	December 31, 2002	Movement in year	December 31, 2003
Total Novartis shares	**2,885,204,680**	**(61,054,680)**	**2,824,150,000**	**(22,680,000)**	**2,801,470,000**
Treasury shares					
Shares reserved for convertible bonds	4,503,754	(4,503,754)			
Shares reserved for call options	54,901,962		54,901,962	(54,901,962)	
Unreserved treasury shares	277,618,704	16,658,715	294,277,419	39,423,921	333,701,340
Total treasury shares	**337,024,420**	**12,154,961**	**349,179,381**	**(15,478,041)**	**333,701,340**

	Number of shares[1]				
Total outstanding shares	**2,548,180,260**	**(73,209,641)**	**2,474,970,619**	**(7,201,959)**	**2,467,768,660**
	(in $ millions)				
Share capital	1,047	(22)	1,025	(8)	1,017
Treasury shares	(122)	(5)	(127)	6	(121)
Outstanding share capital	**925**	**(27)**	**898**	**(2)**	**896**

(1) All shares are registered, authorized, issued and fully paid. All are voting shares and, except for 274,764,019 treasury shares, are dividend bearing.

18. Long-term financial debts

	2003	2002
	($ millions)	($ millions)
Straight bonds	2,972	2,577
Liabilities to banks and other financial institutions[1]	142	119
Finance lease obligations	122	144
Total (including current portion of long-term debt)	**3,236**	**2,840**
Less current portion of long-term debt	(45)	(111)
Total long-term debts	**3,191**	**2,729**
Straight bonds		
US dollar		
6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Florham Park, New Jersey, US	300	300
US dollar		
6.625% Euro Medium Term Note 1995/2005 of Novartis Corporation, Florham Park, New Jersey, US	250	250
US dollar		
9.0% bonds 2006 of Gerber Products Company, Fremont, Michigan, US	35	36
EUR		
EUR 900 million 4.0% bond 2001/2006 of Novartis Securities Investment Ltd., Hamilton, Bermuda[2]	1,127	939
EUR		
EUR 1 billion 3.75% bond 2002/2007 of Novartis Securities Investment Ltd., Hamilton, Bermuda	1,260	1,052
Total straight bonds	**2,972**	**2,577**

(1) Average interest rate 3.4% (2002: 3.4%).

(2) Swapped into Japanese yen on inception and transformed into Swiss francs in 2002.

	2003	2002
	($ millions)	($ millions)
Breakdown by maturity:		
2003		111
2004	45	35
2005	677	615
2006	1,178	986
2007	1,274	1,061
2008	23	
Thereafter	39	32
Total	**3,236**	**2,840**
Breakdown by currency:		
$	719	743
EUR	1,382	97
JPY		1,052
CHF	1,127	939
Others	8	9
Total	**3,236**	**2,840**

Fair value comparison:

	2003 Balance Sheet	2003 Fair Values	2002 Balance Sheet	2002 Fair Values
	($ millions)	($ millions)	($ millions)	($ millions)
Straight bonds	2,972	3,057	2,577	2,672
Others	264	264	263	263
Total	**3,236**	**3,321**	**2,840**	**2,935**

Collateralized long-term debts and pledged assets	2003 ($ millions)	2002 ($ millions)
Total amount of collateralized long-term financial debts	50	67
Total net book value of tangible fixed assets pledged as collateral for long-term financial debts	101	118

The percentage of fixed rate debt to total financial debt was 51% and 46% at December 31, 2003 and 2002, respectively.

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

	2003	2002
	($ millions)	($ millions)
Employee benefits		
unfunded defined benefit plans	930	741
other long-term employee benefits and deferred compensation	183	180
Other post-employment benefits	460	421
Liabilities for insurance activities	766	646
Environmental provisions	177	161
Provision for legal and product liability settlements	335	254
Deferred purchase consideration	4	9
Restructuring provision		3
Other provisions	294	453
Total	**3,149**	**2,868**

a) Environmental matters

Novartis has provisions in respect of environmental remediation costs in accordance with the accounting policy described in Note 1. The accrual recorded at December 31, 2003 consists of $84 million (2002: $82 million) provided for remediation at third-party sites and $95 million (2002: $81 million) for remediation of owned facilities. In the US, Novartis has been named under federal legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as a potentially responsible party ("PRP") in respect to certain sites. Novartis actively participates in, or monitors, the clean-up activities at the sites in which it is a PRP. The estimated 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 costs to fully clean and refurbish contaminated sites and to treat and contain contamination at sites where the environmental exposure is less severe. The Novartis future remediation expenses are affected by a number of uncertainties which include, but are not limited to, the method and extent of remediation, the percentage of material attributable to Novartis at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties.

In connection with the 1997 spin-off of CIBA Specialty Chemicals AG ("CSC") from Novartis AG, a Novartis affiliate has agreed to reimburse CSC 50% of the costs: (i) associated with environmental liabilities arising in the US from the operations of the specialty chemicals business of the US 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 or amount limits but could terminate for certain liabilities in the US upon the occurrence of certain contingencies which include the merger of CSC or the sale of its assets.

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 Group's financial condition but could be material to the results of operations in a given period.

The following table shows the movements in the environmental liability provisions during 2003, 2002 and 2001:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
January 1	**163**	**136**	**131**
Cash payments	(4)	(2)	(2)
Releases	(18)	(8)	(24)
Additions	25	16	34
Translation effect, net	13	21	(3)
December 31	**179**	**163**	**136**
Less short-term liability	(2)	(2)	(2)
Long-term liability at December 31	**177**	**161**	**134**

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, 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.

Augmentin® (amoxicillin/potassium clavulanate)

A series of lawsuits by GlaxoSmithKline (GSK) against affiliates of Novartis regarding amoxicillin/potassium clavulanate, Novartis' generic version of GSK's Augmentin®, have been resolved in the Group's favor. The Group launched the first generic version of this GSK product in the US in July 2002, following favorable decisions by the United States District Court for the Eastern District of Virginia invalidating seven patents alleged by GSK to cover its Augmentin® product. GSK's appeal of the district court's decision was unsuccessful. Novartis has also resolved actions which GSK initiated against several of the Group's affiliates in state courts and before the US International Trade Commission alleging that the potassium clavulanate used in manufacturing the Group's product is produced using GSK trade secrets. In July 2003, an agreement was reached on this issue with GSK. Under the terms of the agreement, GSK will receive single-digit percentage royalties on US sales of generic versions of Augmentin® sold by Novartis or its affiliate companies for the four-year period from July 2002 through June 2006.

Average Wholesale Price Litigation

Claims have been brought against various US pharmaceutical companies, including Novartis affiliates alleging that they have fraudulently overstated the Average Wholesale Price (AWP) and "best price", which is used by the US government to calculate Medicare and Medicaid reimbursements. Novartis affiliates have been named in a number of these cases. Novartis affiliates have also voluntarily participated in an ongoing Congressional inquiry on the subject of AWP and pharmaceutical pricing. Discovery is in process against certain defendants in these cases, but not yet against Group affiliates.

Pharmaceutical Antitrust Litigation

A Novartis affiliate, along with numerous other prescription drug manufacturers, is a co-defendant in various actions brought by certain US retail pharmacies, alleging antitrust and pricing violations. Pretrial motion practice is underway. A trial is scheduled in one of these actions to commence in late 2004.

PPA

Novartis affiliates are parties to over 400 lawsuits in the US brought by people claiming to have been injured by products containing phenylpropanolamine (PPA) sold by certain of those affiliates. These cases are in various stages of litigation with Novartis having achieved victories in the first three claims to have gone to trial. However, other trials are currently ongoing, and more will follow. There can be no guarantee that our initial successes will be repeated or sustained in the event of an appeal.

SMON (Subacute Myelo Optico Neuropathy)

In 1996 an affiliate of Ciba-Geigy, one of the predecessor companies of Novartis, together with two other pharmaceutical companies, settled certain product liability issues related to sales of its product *Clioquinol*® in Japan. Under the settlement, a Novartis affiliate is required to pay certain future health care costs of the claimants.

Terazosin

A Sandoz affiliate is a defendant in a number of lawsuits in the US claiming injuries and damages allegedly arising out of violation of antitrust laws in the settlement, by the affiliate and Abbott Pharmaceuticals, of a contentious patent litigation involving Abbott's Hytrin® and the Sandoz generic equivalent product. The affiliate has a judgment sharing agreement with Abbott that caps its liability. In addition, in one of the proceedings, the affiliate was successful in overturning on appeal a trial court decision that the settlement of the litigation was *per se* unlawful, and certifying a plaintiff's class. The case has been remanded to the trial court for further proceedings.

US enteral pump market

A Novartis Medical Nutrition affiliate in the US is a subject of an investigation by the US Department of Justice regarding marketing and pricing practices in the US enteral pump market, including whether certain federal criminal statutes have been violated. Novartis is cooperating with that investigation.

Novartis believes that its affiliates have meritorious defenses in these cases, and they are vigorously defending each of them.

From time to time, the Group's affiliates may be the subject of government investigations arising out of the normal conduct of their business. Consistent with the Novartis Code of Conduct and policies regarding compliance with law, it is the Group's policy to cooperate with such investigations.

Novartis maintains general liability insurance, including product liability insurance, covering claims on a worldwide basis. While claims could be made against the Group's affiliates which, in whole or in part, might not be covered by insurance, the Group believes that its insurance coverage limits and retention amounts are reasonable and prudent in light of its businesses and the risks to which the Group is subject.

The following table shows the movements in the legal and product liability provisions during 2003, 2002 and 2001:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
January 1	**420**	**316**	**391**
Consolidation changes	26		
Cash payments	(152)	(60)	(114)
Releases	(158)	(19)	(14)
Additions	317	160	71
Translation effect, net	18	23	(18)
December 31	**471**	**420**	**316**
Less short-term liability	(136)	(166)	(115)

	2003	2002	2001
Long-term liability at December 31	**335**	**254**	**201**

20. Short-term financial debts

	2003	2002
	($ millions)	($ millions)
Interest bearing employee accounts	926	816
Other bank and financial debt	660	634
Commercial paper	649	949
Current portion of long-term financial debt	45	111
Fair value of derivative financial instruments	499	331
Total	**2,779**	**2,841**

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 3.1%, 3.5%, and 3.8% in 2003, 2002, and 2001 respectively.

21. Other short-term liabilities

	2003	2002
	($ millions)	($ millions)
Income and other taxes	872	546
Restructuring liabilities	43	98
Accrued expenses	2,912	2,366
Potential claims from insurance activities	149	206
Social security/pension funds	80	70
Environmental liabilities	2	2
Deferred income relating to government grants	14	14
Goods returned and commission liabilities	15	9
Legal and product liability settlements	136	166
Other payables	653	688
Total	**4,876**	**4,165**

Restructuring charges

In May 2001, charges of $12 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 $11 million and other third party costs of $1 million. 250 associates were identified in the original plan, all of whom have left the Group as of December 31, 2002.

In October 2002, charges of $20 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 $8 million and other third party costs of $12 million. 45 employees not transferred to ABF were identified in the original plan, all but 4 of whom have now left the Group. These 4 associates are fulfilling an interim service level agreement with the new owners and are expected to leave in 2005. All other significant actions associated with the restructuring plan are expected to be completed during 2004.

In December 2002, provision was made for charges of $28 million in conjunction with the plan to re-organize the Health Food and Slimming as well as Sports Nutrition businesses into a stand-alone unit called Nutrition & Santé. The charges comprised employee termination costs of $17 million and other third party costs of $11 million. 120 associates were identified in the original plan, of whom 25 remained employed by the Group as at December 31, 2003, but all of whom are expected to leave in 2004. All other actions of this plan will be completed in 2004.

In December 2002 charges of $10 million were incurred in conjunction with a plan to restructure the OTC business. The charges comprised employee termination costs of $9 million and other third party costs of $1 million. 90 associates were impacted by the restructuring, of whom 5 remain employed by the Group as at December 31, 2003, but all of whom are expected to leave in 2004. All other actions of this plan will also be completed in 2004.

In 2003 there were no significant restructuring charges.

The releases to income in 2003, 2002 and 2001 of $12 million, $23 million and $11 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 2003 and 2002, there were no tangible fixed asset impairments which were charged directly to the income statement without being recorded in the restructuring provision (2001: $18 million).

	Employee termination costs	Tangible fixed asset impairments	Other third party costs	Total
	($ millions)	($ millions)	($ millions)	($ millions)
Balance at January 1, 2001	**85**	**32**	**124**	**241**
Cash payments	(50)		(49)	(99)
Releases	(9)	(1)	(1)	(11)
Additions	11		1	12
Translation effect, net	(1)		(1)	(2)
Balance at December 31, 2001	**36**	**31**	**74**	**141**
Cash payments	(21)		(58)	(79)
Releases	(6)	(12)	(5)	(23)
Additions	34		24	58
Non-income tangible fixed asset write-offs		(4)		(4)
Translation effect, net	3		2	5
Balance at December 31, 2002	**46**	**15**	**37**	**98**

	Employee termination costs	Tangible fixed asset impairments	Other third party costs	Total
Cash payments	(27)		(16)	(43)
Releases	(1)	(2)	(9)	(12)
Balance at December 31, 2003	**18**	**13**	**12**	**43**

22. Cash flows arising from changes in net current assets and other operating cash flow items

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Change in inventories	(78)	(275)	(18)
Change in trade accounts receivable and other net current assets	297	49	(15)
Change in trade accounts payable	238	74	148
Total	**457**	**(152)**	**115**

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:

	2003 Acquisitions	2002 Acquisitions	2002 Divestments	2001 Acquisitions	2001 Divestments
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
Tangible fixed assets	(1)	(165)	61	(31)	13
Other identifiable long-term assets	(24)	(28)	5	(37)	
Inventories	(1)	(125)	19	(27)	
Trade accounts receivable and other current assets	(1)	(106)	33	(43)	
Marketable securities, cash and short-term deposits		(103)	20	(10)	
Long-term and short-term debt to third parties		5	(21)	88	
Trade accounts payable and other liabilities	36	133	21	49	3
Net identifiable assets acquired/divested	**9**	**(389)**	**138**	**(11)**	**16**
Less acquired/divested liquidity	18	103	(20)	10	
Less decrease in investments in associated companies				66	
Sub-total	**27**	**(286)**	**118**	**65**	**16**
Goodwill	(303)	(618)		(207)	
Divestment gains			133		25
Amount settled in treasury shares		78			

	2003 Acquisitions	2002 Acquisitions	2002 Divestments	2001 Acquisitions	2001 Divestments
Translation effects	4	33			
Net Cash Flow	**(272)**	**(793)**	**251**	**(142)**	**41**

The significant changes in the companies that have been consolidated are described in Note 2. All acquisitions were for cash, except in 2002 an amount equivalent to $78 million which was settled in Novartis ADSs.

24. Changes in consolidated equity

(a) The 2003, 2002 and 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	Fair value of deferred cash flow hedges	Total
	($ millions)	($ millions)	($ millions)
Fair value adjustments at January 1, 2001	**1,185**	**63**	**1,248**
Changes in fair value:			
available-for-sale marketable securities	(89)		(89)
cash flow hedges		11	11
Realized gains or losses transferred to the income statement:			
marketable securities sold	(385)		(385)
derivative financial instruments	(158)	(91)	(249)
Impaired marketable securities and other financial assets	60		60
Deferred tax on above	43	7	50
Fair value adjustments at December 31, 2001	**656**	**(10)**	**646**
Changes in fair value:			
available-for-sale marketable securities	(494)		(494)
cash flow hedges		144	144
other financial assets	(344)		(344)
Realized gains or losses transferred to the income statement:			
marketable securities sold	(174)		(174)
derivative financial instruments		(88)	(88)
other financial assets sold	(8)		(8)
Impaired other financial assets	64		64
Reclassification in equity[1]	(98)	79	(19)
Deferred tax on above	99	(12)	87
Fair value adjustments at December 31, 2002	**(299)**	**113**	**(186)**
Changes in fair value:			

	Fair value adjustments to marketable securities	Fair value of deferred cash flow hedges	Total
available-for-sale marketable securities	146		146
cash flow hedges		26	26
other financial assets	21		21
associated companies' equity movements	41		41
Realized gains or losses transferred to the income statement:			
marketable securities sold	92		92
derivative financial instruments		(165)	(165)
other financial assets sold	1		1
Impaired marketable securities and other financial assets	146		146
Deferred tax on above	(74)	33	(41)
Fair value adjustments at December 31, 2003	**74**	**7**	**81**

(1) Transfer of $98 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 $79 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 Group's share in associated companies' currency translation adjustments, unrealized fair value adjustments on marketable securities and hedging transactions are allocated directly to the appropriate component of the Group's consolidated statement of changes in equity.

(c) The Board of Directors proposes a dividend of CHF 1.00 per share for 2003 (2002: CHF 0.95 per share amounting to $1.7 billion which was paid in 2003; 2001: CHF 0.90 per share amounting to $1.4 billion which was paid in 2002) totaling $2.0 billion for all dividend bearing shares. The amount available for dividend distribution is based on the available distributable retained earnings of Novartis AG determined in accordance with the legal provisions of the Swiss Code of Obligations.

(d) $939 million of shares were acquired during 2003 under the Group's third share buy-back program on the second trading line and $666 million shares, net were sold on the first trading line. This resulted in a net reduction in Group consolidated equity of $273 million (2002: $3.2 billion; 2001: $2.2 billion).

(e) 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. The Group received EUR 2.2 billion in proceeds (EUR 40 per LEPO). The Group accounted for the LEPOs as an increase in share premium at fair value less related issuance costs. Following changes in US GAAP and expected changes in IFRS rules, Novartis redeemed, in advance, these equity instruments on June 26, 2003.

(f) 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. The Group received EUR 0.6 billion in proceeds (EUR 11 per put option). The Group accounted for the option premium associated with the put options as an increase in share premium less related issuance costs. Following changes in US GAAP and expected changes in IFRS rules, Novartis redeemed, in advance, these equity instruments on June 26, 2003.

(g)

Goodwill previously written-off against retained earnings, in accordance with IFRS in effect prior to 1995, has been transferred to the income statement as a reduction of a gain following the renegotiation in 2002 of the final purchase price of this 1994 transaction.

(h) Pursuant to a resolution approved at the March 4, 2003 Annual General Meeting, 22.7 million shares with a nominal value of $8 million were cancelled representing shares acquired in 2002 on the second trading line buy-back program (2002: 61.1. million shares were cancelled with a nominal value of $22 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, 2003 and 2002:

	2003	2002
	($ millions)	($ millions)
Funded assets of independent defined benefit	16,128	14,365
Defined benefit obligations of active and retired employees of funded plans	(13,112)	(11,320)
Funded Status	**3,016**	**3,045**
Defined benefit obligations of active and retired employees of unfunded plans	(753)	(525)
Unrecognized past service costs	6	
Unrecognized actuarial losses, net of gains	777	266
Net asset in balance sheet	**3,046**	**2,786**

The net asset in the balance sheet consists of:

	2003	2002
	($ millions)	($ millions)
Prepaid pension expense included in financial assets and other assets	3,976	3,527
Accrued pension costs included in other long-term liabilities	(930)	(741)
Total net asset	**3,046**	**2,786**

The following are the principal actuarial assumptions, used for calculating the 2003, 2002, and 2001 income statement amounts and the above stated December 31, 2003 and 2002 funded status of the main defined benefit plans:

	Income statement	Funded status

Weighted average %	Income statement			Funded status	
	2003	2002	2001	2003	2002
	%	%	%	%	%
Discount	4.6	4.5	4.6	4.3	4.5
Payroll indexation	2.8	2.8	2.8	2.8	2.8
Return on assets	5.6	6.1	6.1	5.6	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, 2003 amounts to $183 million (2002: $180 million). In 2003 contributions charged to the consolidated income statement for the defined contribution plans were $84 million (2002: $85 million; 2001: $67 million).

The number of Novartis AG shares held by pension and similar benefit funds at December 31, 2003 was 31.5 million shares with a market value of $1.3 billion (2002: 31.5 million shares with a market value of $1.1 billion; 2001: 34 million shares with a market value of $1.2 billion).

These funds did not dispose of any Novartis AG shares during the year ended December 31, 2003 (2002: 2.5 million shares). The amount of dividends received on Novartis AG shares held as plan assets by these funds were $22 million for the year ended December 31, 2003 (2002: $22 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	
	2003	2002	2003	2002
	($ millions)			
Asset/(liability) at January 1	**2,786**	**2,227**	**(421)**	**(416)**
Increase in prepaid pensions	449	643		
Increase in accrued liabilities	(189)	(84)	(39)	(5)
Asset/(liability) at December 31	**3,046**	**2,786**	**(460)**	**(421)**

The amounts recognized in the income statement are as follows:

	Defined benefit pension plans			Other post-employment benefits		
	2003	2002	2001	2003	2002	2001
	($ millions)					

	Defined benefit pension plans			Other post-employment benefits		
Expected return on plan assets	796	970	904			
Employee contributions	39	7	20			
Current service cost	(285)	(277)	(214)	(19)	(14)	(9)
Interest cost	(559)	(552)	(491)	(40)	(36)	(31)
Past service costs	27			4		
Amortization of actuarial gains and losses	(72)	(9)	(13)	(8)	(4)	(3)
Income/(expense)[1]	**(54)**	**139**	**206**	**(63)**	**(54)**	**(43)**

(1) In 2001, $64 million of settlement gains associated with Group restructurings were included in pension income.

The actual return on plan assets for 2003 taking into account realized and unrealized capital gains and losses was a gain of $916 million (2002: $1,173 million loss; 2001: $439 million loss).

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

	2003 Weighted average	2002 Weighted average	2001 Weighted average
	%	%	%
Discount rate	6.3	6.8	7.5
Healthcare cost trend (initial)	9.0	10.0	9.0
Healthcare cost trend (ultimate)	4.8	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, share options are granted annually as part of the remuneration of executives and other employees, as selected by the Board's Compensation Committee. These options are exercisable after two years and expire after nine years. Each option entitles the holder to acquire one Novartis AG share at a predetermined exercise price. In May 2001, the Novartis AG shares were split 40 to 1. Options granted prior to that date entitled the holder to acquire 40 Novartis AG shares per option. 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. In order to further align the Novartis Share Option Plan and the US ADS Incentive Plan, as of 2004 the vesting period for the Novartis Share Option Plan has been increased to three years.

2003		2002	
Options	Weighted average exercise	Options	Weighted average exercise

	2003		2002	
		price		price
	(millions)	($)	(millions)	($)
Options outstanding at January 1	**11.5**	**43.6**	**7.2**	**35.4**
Granted	9.8	39.0	5.6	44.3
Exercised	(0.1)	43.3	(1.0)	40.1
Cancelled	(0.2)	43.3	(0.3)	43.9
Outstanding at December 31	**21.0**	**44.3**	**11.5**	**43.6**
Exercisable at December 31	**6.0**	**47.8**	**3.8**	**38.4**
Weighted average fair value of options granted during the year ($)		15		8

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, 2003:

	Options outstanding			Options exercisable	
Range of exercise prices	**Number outstanding**	**Average remaining contractual life**	**Weighted average exercise price**	**Number exercisable**	**Weighted average exercise price**
($)	**(millions)**	**(years)**	**($)**	**(millions)**	**($)**
30 34	0.8	3.2	34.0	0.8	34.0
35 39	9.8	8.0	39.1	0.1	38.8
40 44	1.8	5.1	41.1	1.8	41.1
45 49	5.3	7.1	49.6		
50 54	0.9	4.2	54.7	0.9	54.7
55 59	2.4	6.1	56.0	2.4	56.0
Total	**21.0**	**7.0**	**44.3**	**6.0**	**47.8**

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 exercise price as part of the remuneration of US-based executives and other selected employees. 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 US-based 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 at the grant date.

	2003		2002	
	ADS Options	**Weighted average**	**ADS Options**	**Weighted average**

	2003		2002	
		exercise price		exercise price
	(millions)	($)	(millions)	($)
Options outstanding at January 1	**23.2**	**39.3**	**8.5**	**42.1**
Granted	20.0	36.4	15.8	37.3
Exercised	(0.1)	41.8		
Cancelled	(2.5)	38.0	(1.1)	39.5
Outstanding at December 31	**40.6**	**37.7**	**23.2**	**38.8**
Exercisable at December 31	**1.2**	**38.8**	**0.7**	**39.3**
Weighted average fair value of options granted during the year ($)		17		11

All ADS options were granted at an exercise price which was equal to, or greater than, the market price of the ADS at the grant date.

The following table summarizes information about ADS options outstanding at December 31, 2003:

	Options outstanding			Options exercisable	
Range of exercise prices	**Number outstanding**	**Average remaining contractual life**	**Weighted average exercise price**	**Number exercisable**	**Weighted average exercise price**
($)	**(millions)**	**(years)**	**($)**	**(millions)**	**($)**
31 35	0.1	6.5	34.0		
36 40	33.3	8.2	36.7	0.8	37.1
41 45	7.2	7.3	42.0	0.4	42.2
Total	**40.6**	**8.0**	**37.7**	**1.2**	**38.8**

c) Long-Term Performance Plan

This plan is offered to selected executives. Under the Long-Term Performance Plan, participants are awarded the right to earn Novartis AG shares. Actual payouts, if any, are dependent on achievements of long-term targets such as economic value added relative to pre-determined 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, no shares will be earned. 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 2003 a total of 507,507 shares (2002: 232,548 shares) were granted to executives.

d) Leveraged Share Savings Plan

Participants under this plan can make an election to receive all or part of their annual incentive award in Novartis AG shares. Shares received under the plan are blocked for a five year period after the grant date. At the end of the blocking period, Novartis will match the respective shares on a one-for-one basis. During 2003, 279,619 shares (2002: 245,838 shares) were granted to participants.

e) 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. Shares received under the plan have a three year blocking period and are matched with one share for every two shares held at the end of the blocking period. In 2003 the Swiss employees received 3,942,687 shares for the first time under this scheme.

f) Old Swiss Employee Share Ownership Plan

In 1998, a Swiss Employee Share Ownership Plan was introduced for all employees of Swiss subsidiaries. This Plan 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 in 2002. In 2002, 406,448 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 only participate in the new ESOP.

g) 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. During 2003 a total of 233,510 shares (2002: 117,902 shares) were granted to executives and selected employees.

Movements in Novartis AG shares held by the Novartis Foundation for Employee Participation were as follows:

	2003	2002	2001
	Number of shares	Number of shares	Number of shares
	(000)	(000)	(000)
January 1	**95,072**	**101,312**	**98,000**
Shares bought/sold	1,163	(5,238)	4,175
Shares distributed to employees	(2,935)	(1,002)	(863)
December 31	**93,300**	**95,072**	**101,312**

The market value of the Novartis AG shares held by the Foundation at December 31, 2003 was $4.2 billion (2002: $3.4 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. Each of these foundations is autonomous and its board is responsible for its respective administration in accordance with the foundation's purpose and applicable law.

The Novartis Foundation for Employee Participation has not been included in the consolidated financial statements prepared under IFRS as Interpretation No. 12 of the Standing Interpretations Committee exempts post-employment and equity compensation plans from its scope. The total assets of this Foundation as of December 31, 2003 included 93.3 million shares of Novartis AG with a market value of $4.2 billion. As of December 31, 2002, the assets included 95.1 million Novartis shares with a market value of $3.4 billion. This Foundation is consolidated under US GAAP and is included as a reconciling item in the US GAAP reconciliation.

In 2003, the Group granted short-term loans totaling $651 million to the above mentioned foundations and received short-term loans totaling $8 million from them. In 2002, the Group granted short-term loans totaling $623 million to the foundations, received short-term loans totaling $2 million from them.

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, 2003 these foundations held approximately 6.1 million shares of Novartis, with a cost of approximately $32 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

All remaining significant matters in connection with the 1999 Master Agreement between Novartis AG and AstraZeneca Plc for the spin-off and merger of their respective agrochemical businesses into Syngenta AG have been completed during 2003.

Chiron Corporation

In connection with its original investment in Chiron, Novartis has agreed to:

- purchase up to $500 million of new Chiron equity at fair value, at Chiron's request. To date, Chiron has made no such request.
- guarantee up to $703 million of Chiron debt. Utilization of the guarantee in excess of $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

Commitments arising from fixed-term operational leases in effect at December 31 are as follows:

	2003
	($ millions)
2004	211
2005	172
2006	119
2007	87
2008	69
Thereafter	270
Total	**928**
Expense of current year	**232**

The leasing expense from fixed term operational leases was $232 million, $183 million, and $121 million for 2003, 2002, and 2001, respectively.

Research & Development commitments

The Group has entered into long-term research agreements with various institutions, including $729 million of potential milestone payments. As of December 31, 2003 they are as follows:

	2003
	($ millions)
2004	524
2005	337
2006	243
2007	101
2008	154
Thereafter	181
Total	**1,540**

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

	2003	2002	2001
	($)	($)	($)
Year end rates used for the consolidated balance sheets:			
1 CHF	0.800	0.712	0.596
1 EUR	1.247	1.038	0.881
1 GBP	1.774	1.601	1.449
100 JPY	0.935	0.834	0.761
Average rates of the year used for the consolidated income and cash flow statements:			
1 CHF	0.745	0.643	0.593
1 EUR	1.131	0.946	0.896
1 GBP	1.636	1.503	1.440
100 JPY	0.867	0.802	0.821

30. Events subsequent to the December 31, 2003 balance sheet date

On December 16, 2003, the Medical Nutrition Business Unit announced its intention to acquire the brands, trademarks, patents and intellectual property assets of Mead Johnson & Company's global adult medical nutrition business in a $385 million cash transaction. Mead Johnson & Company, a subsidiary of Bristol-Myers Squibb Company, is a leader in sales and marketing of adult medical nutrition products. Completion of this transaction is pending subject to finalization of regulatory review.

A US subsidiary, Idenix Inc., has filed with the US Securities & Exchange Commission (SEC) for an initial public offering of its shares on a US stock exchange. The exact timing and terms of the offering have still to be decided.

The 2003 consolidated financial statements of the Novartis Group were approved by the Novartis AG Board of Directors on January 20, 2004.

31. Group subsidiaries and associated companies as at December 31, 2003

The following descriptions 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**: The entity performs research and development activities for the Group.

	Share/paid-in capital[1]		Equity Interest %	Activities			
Argentina							
Novartis Argentina S.A., Buenos Aires	ARS	230.6 m	100		*	*/	
Australia							
Novartis Australia Pty Ltd., North Ryde, NSW	AUD	11.0 m	100	/*/			
Novartis Pharmaceuticals Australia Pty Ltd., North Ryde, NSW	AUD	3.8 m	100		*		/*\
Novartis Consumer Health Australasia Pty Ltd., Mulgrave, Victoria	AUD	7.6 m	100		*	*/	
Novartis Animal Health Australasia Pty Ltd., North Ryde, NSW	AUD	3.0 m	100		*		/*\
Austria							
Novartis Pharma GmbH, Vienna	EUR	1.1 m	100		*		
Novartis Forschungsinstitut GmbH, Vienna	EUR	10.9 m	100				/*\
Sandoz GmbH, Vienna	EUR	100,000	100	/*/			
Sandoz GmbH, Kundl	EUR	32.7 m	100	/*/	*	*/	/*\
Novartis Animal Health GmbH, Kundl	EUR	37,000	100		*		
Bangladesh							
Novartis (Bangladesh) Limited, Dhaka	BDT	162.5 m	60		*	*/	
Belgium							
N.V. Novartis Management Services S.A., Vilvoorde	EUR	7.5 m	100	/*/			
N.V. Novartis Pharma S.A., Vilvoorde	EUR	7.1 m	100		*		
N.V. Novartis Consumer Health S.A., Bruxelles	EUR	4.8 m	100		*		
N.V. CIBA Vision Benelux S.A., Mechelen	EUR	62,000	100		*		
Bermuda							
Triangle International Reinsurance Ltd., Hamilton	CHF	1.0 m	100	/*/			
Novartis Securities Investment Ltd., Hamilton	CHF	30,000	100	/*/			
Novartis International Pharmaceutical Ltd., Hamilton	CHF	10.0 m	100	/*/	*		
Brazil							
Novartis Biociências S.A., São Paulo	BRL	158.1 m	100		*	*/	
Novartis Saúde Animal Ltda., São Paulo	BRL	19.9 m	100		*	*/	

	Share/paid-in capital[1]		Equity Interest %	Activities	
Canada					
Novartis Pharmaceuticals Canada Inc., Dorval/Montreal	CAD	1.3 m	100	*	/*\
Novartis Consumer Health Canada Inc., Mississauga, Ontario	CAD	2	100	*	
CIBA Vision Canada Inc., Mississauga, Ontario	CAD	1	100	*	*/
Chile					
Novartis Chile S.A., Santiago de Chile	CLP	2.0 bn	100	*	

Equity interest % above 50% and up to 100% of the voting rights fully consolidated;

above 20% and up to 50% of the voting rights investment in associated company equity method accounting.

(1) Share/paid-in capital may not reflect the taxable share/paid-in capital amount.

m = million; bn = billion; tr = trillion.

	Share/paid-in capital[1]		Equity Interest %	Activities	
China					
Beijing Novartis Pharma Ltd., Beijing	CNY	111.3 m	78	*	*/
Novartis Pharmaceuticals (HK) Limited, Hong Kong	HKD	200	100	*	
Colombia					
Novartis de Colombia S.A., Santafé de Bogotá	COP	20.9 bn	100	*	*/
Croatia					
Lek Zagreb d.o.o., Zagreb	HRK	25.6 m	100	*	*/
Czech Republic					
Novartis s.r.o., Prague	CZK	51.5 m	100	*	
Denmark					
Novartis Healthcare A/S, Copenhagen	DKK	8.0 m	100	*	
Ecuador					
Novartis Ecuador S.A., Quito	USD	209,193	100	*	
Egypt					
Novartis Pharma S.A.E., Cairo	EGP	33.8 m	99		*/
Novartis Egypt (Healthcare) S.A.E., Cairo	EGP	250,000	95	*	
Finland					
Novartis Finland Oy, Espoo	EUR	459,000	100	*	
France					
Novartis Groupe France S.A., Rueil-Malmaison	EUR	263.0 m	100	/*/	
Novartis France S.A.S., Rueil-Malmaison	EUR	1.4 m	100	/*/	
Novartis Pharma S.A.S., Rueil-Malmaison	EUR	43.4 m	100	*	*/ /*\
Sandoz S.A.S., Levallois-Perret	EUR	2.6 m	100	*	
Novartis Santé Familiale S.A.S., Rueil-Malmaison	EUR	21.9 m	100	*	*/

	Share/paid-in capital[1]		Equity Interest %	Activities			
Novartis Santé Animale S.A.S., Rueil-Malmaison	EUR	900,000	100		*	*/	
Novartis Nutrition S.A.S., Revel	EUR	300,000	100		*	*/	
Nutrition et Santé S.A., Revel	EUR	30.2 m	100	/*/	*	*/	/*\
CIBA Vision S.A.S., Blagnac	EUR	1.8 m	100		*		
Germany							
Novartis Deutschland GmbH, Wehr	EUR	35.8 m	100	/*/			
Novartis Pharma GmbH, Nuremberg	EUR	25.6 m	100		*	*/	/*\
Sandoz Pharmaceuticals GmbH, Ismaning	EUR	5.1 m	100		*	*/	
Sandoz Industrial Products GmbH, Frankfurt am Main	EUR	2.6 m	100		*	*/	
Novartis Consumer Health GmbH, Munich	EUR	14.6 m	100		*	*/	/*\
Novartis Nutrition GmbH, Munich	EUR	23.5 m	100		*	*/	/*\
CIBA Vision Vertriebs GmbH, Grossostheim	EUR	2.6 m	100		*		
CIBA Vision GmbH, Grosswallstadt	EUR	15.4 m	100		*	*/	/*\
Gibraltar							
Novista Insurance Limited, Gibraltar	CHF	130.0 m	100	/*/			

Equity interest % above 50% and up to 100% of the voting rights fully consolidated;

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(1) Share/paid-in capital may not reflect the taxable share/paid-in capital amount.

m = million; bn = billion; tr = trillion.

	Share/paid-in capital[1]		Equity Interest %	Activities			
Great Britain							
Novartis UK Ltd., Farnborough	GBP	25.5 m	100	/*/			
Novartis Pharmaceuticals UK Ltd., Frimley/Camberley	GBP	5.4 m	100		*	*/	/*\
Novartis Grimsby Ltd., Farnborough	GBP	228.9 m	100			*/	
Sandoz Ltd., Bordon	GBP	2.0 m	100		*		
Novartis Consumer Health UK Ltd., Horsham	GBP	25,000	100		*	*/	
Novartis Animal Health UK Ltd., Royston	GBP	100,000	100		*		/*\
Vericore Ltd., Royston	GBP	2	100		*	*/	
CIBA Vision (UK) Ltd., Southampton	GBP	550,000	100		*		
Greece							
Novartis (Hellas) S.A.C.I., Athens	EUR	14.6 m	100		*		
Hungary							
Novartis Hungary Healthcare Limited Liability Company, Budapest	HUF	545.6 m	100		*		
India							
Novartis India Limited, Mumbai	INR	159.8 m	51		*	*/	
Sandoz Private Limited, Mumbai	INR	32.0 m	100		*	*/	
Indonesia							
PT Novartis Biochemie, Jakarta	IDR	7.7 bn	69		*	*/	
PT CIBA Vision Batam, Batam	IDR	11.9 bn	100			*/	
Ireland							

	Share/paid-in capital[1]		Equity Interest %	Activities			
Novartis Ireland Limited, Dublin	EUR	25,000	100		*		
Novartis Ringaskiddy Limited, Ringaskiddy, County Cork	EUR	2.0 m	100			*/	
Italy							
Novartis Farma S.p.A., Origgio	EUR	18.2 m	100	/*/	*	*/	/*\
Sandoz Industrial Products S.p.A., Rovereto	EUR	2.6 m	100			*/	
Novartis Consumer Health S.p.A., Origgio	EUR	2.9 m	100		*		
CIBA Vision S.r.l., Marcon	EUR	2.4 m	100		*		
Japan							
Novartis Pharma K.K., Tokyo	JPY	6.0 bn	100		*		/*\
Ciba-Geigy Japan Limited, Tokyo	JPY	8.5 bn	100			*/	
CIBA Vision K.K., Tokyo	JPY	495.0 m	100		*		
Luxembourg							
Novartis Investments S.à r.l., Luxembourg	USD	2.6 bn	100	/*/			
Malaysia							
Novartis Corporation (Malaysia) Sdn. Bhd., Kuala Lumpur	MYR	3.3 m	70		*		
Mexico							
Novartis de México, S.A. de C.V., Mexico City	MXN	205.0 m	100	/*/			
Novartis Farmacéutica, S.A. de C.V., Mexico City	MXN	80.7 m	100		*	*/	
Novartis Nutrition, S.A. de C.V., Mexico City	MXN	2.0 m	100		*		
Productos Gerber, S.A. de C.V., Mexico City	MXN	12.5 m	100		*	*/	

Equity interest % above 50% and up to 100% of the voting rights fully consolidated;

above 20% and up to 50% of the voting rights investment in associated company equity method accounting.

(1) Share/paid-in capital may not reflect the taxable share/paid-in capital amount.

m = million; bn = billion; tr = trillion.

	Share/paid-in capital[1]		Equity Interest %	Activities			
Netherlands							
Novartis Netherlands B.V., Arnhem	EUR	1.4 m	100	/*/			
Novartis Pharma B.V., Arnhem	EUR	4.5 m	100		*		
Sandoz B.V., Weesp	EUR	907,570	100		*	*/	
Novartis Consumer Health B.V., Breda	EUR	23,830	100		*	*/	
Netherlands Antilles							
Sandoz N.V., Curação	USD	6,000	100	/*/	*		
Norway							
Novartis Norge AS, Oslo	NOK	1.5 m	100		*		
Pakistan							
Novartis Pharma (Pakistan) Limited, Karachi	PKR	24.8 m	98		*	*/	
Panama							

	Share/paid-in capital[1]		Equity Interest %	Activities			
Novartis Pharma (Logistics), Inc., Panama	USD	10,000	100		*		
Philippines							
Novartis Healthcare Philippines, Inc., Makati/Manila	PHP	298.8 m	100		*		
Poland							
Novartis Poland Sp. z o.o., Warsaw	PLN	44.2 m	100		*		
Lek Polska Sp. z o.o., Pruszkow	PLN	25.6 m	100		*		
Alima-Gerber S.A., Warsaw	PLN	45.4 m	100		*	*/	
Portugal							
Novartis Portugal SGPS Lda., Sintra	EUR	500,000	100	/*/			
Novartis Farma Produtos Farmacêuticos S.A., Sintra	EUR	2.4 m	100		*		
Novartis Consumer Health Produtos Farmacêuticos e Nutrição Lda., Lisbon	EUR	100,000	100		*		
Puerto Rico							
Gerber Products Company of Puerto Rico, Inc., Carolina	USD	1.0 m	100		*	*/	
CIBA Vision Puerto Rico, Inc., Cidra	USD	14.0 m	100			*/	
Russian Federation							
Novartis Pharma ZAO, Moscow	RUR	17.5 m	100		*		
Singapore							
Novartis Institute for Tropical Diseases Pte Ltd., Singapore	SGD	2,004	100				/*\
Slovenia							
Lek Pharmaceuticals d.d., Ljubljana	SIT	11.6 m	100	/*/	*	*/	/*\
South Africa							
Novartis South Africa (Pty) Ltd., Spartan/Johannesburg	ZAR	86.4 m	100		*	*/	
South Korea							
Novartis Korea Ltd., Seoul	KRW	24.5 bn	99		*	*/	

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(1) Share/paid-in capital may not reflect the taxable share/paid-in capital amount.

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	Share/paid-in capital[1]		Equity Interest %	Activities			
Spain							
Novartis Farmacéutica, S.A., Barcelona	EUR	64.5 m	100	/*/	*	*/	
Sandoz Farmacéutica, S.A., Barcelona	EUR	270,450	100		*	*/	/*\
Sandoz Industrial Products, S.A., Les Franqueses del Vallés/Barcelona	EUR	9.3 m	100		*	*/	/*\
Novartis Consumer Health, S.A., Barcelona	EUR	876,919	100		*	*/	
CIBA Vision, S.A., Barcelona	EUR	1.4 m	100		*	*/	/*\

	Share/paid-in capital[1]		Equity Interest %	Activities			
Sweden							
Novartis Sverige Participations AB, Täby/Stockholm	SEK	51.0 m	100	/*/			
Novartis Sverige AB, Täby/Stockholm	SEK	5.0 m	100		*		
CIBA Vision Nordic AB, Askim/Göteborg	SEK	2.5 m	100		*		
Switzerland							
Novartis International AG, Basel	CHF	10.0 m	100	/*/			
Novartis Holding AG, Basel	CHF	100.2 m	100	/*/			
Novartis Securities AG, Basel	CHF	50.0 m	100	/*/			
Novartis Research Foundation, Basel	CHF	29.3 m	100				/*\
Novartis Foundation for Management Development, Basel	CHF	100,000	100	/*/			
Roche Holding AG, Basel	CHF	160.0 m	33	/*/	*	*/	/*\
Novartis Pharma AG, Basel	CHF	350.0 m	100	/*/	*	*/	/*\
Novartis Pharma Services AG, Basel	CHF	50,000	100		*		
Novartis Pharma Schweizerhalle AG, Schweizerhalle	CHF	18.9 m	100			*/	
Novartis Pharma Stein AG, Stein	CHF	251,000	100			*/	/*\
Novartis Pharma Schweiz AG, Bern	CHF	5.0 m	100		*		
Novartis Ophthalmics AG, Hettlingen	CHF	200,000	100	/*/	*	*/	/*\
Novartis Consumer Health S.A., Nyon	CHF	30.0 m	100	/*/	*	*/	/*\
Novartis Consumer Health Schweiz AG, Bern	CHF	250,000	100		*		
Novartis Animal Health AG, Basel	CHF	101,000	100	/*/	*	*/	/*\
Novartis Centre de Recherche Santé Animale S.A., St.Aubin	CHF	250,000	100				/*\
Novartis Nutrition AG, Bern	CHF	40.0 m	100	/*/			
CIBA Vision AG, Embrach	CHF	300,000	100	/*/	*		
Taiwan							
Novartis (Taiwan) Co., Ltd., Taipei	TWD	170.0 m	100		*	*/	
Thailand							
Novartis (Thailand) Limited, Bangkok	THB	230.0 m	100		*		
Turkey							
Novartis Saglik, Gida ve Tarim Ürünleri Sanayi ve Ticaret A.S., Istanbul	TRL	49.1 tr	100		*	*/	

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m = million; bn = billion; tr = trillion.

	Share/paid-in capital[1]		Equity Interest %	Activities			
USA							
Novartis Corporation, Florham Park, NJ	USD	1.2 bn	100	/*/			
Novartis Finance Corporation, New York, NY	USD	5.0 bn	100	/*/			
Novartis Pharmaceuticals Corporation, East Hanover, NJ	USD	5.2 m	100		*	*/	/*\
Novartis Ophthalmics, Inc., Duluth, GA	USD	350.0 m	100		*	*/	
Novartis Institutes for BioMedical Research, Inc., Cambridge, MA	USD	35.0 m	100				/*\

	Share/paid-in capital[1]		Equity Interest %	Activities			
Novartis Institute for Functional Genomics, Inc., San Diego, CA	USD	175.4 m	100				/*\
Chiron Corporation, Emeryville, CA	USD	2.5 bn	42	/*/	*	*/	/*\
Idenix Pharmaceuticals, Inc., Cambridge, MA	USD	191.3 m	54				/*\
Sandoz Inc., Princeton, NJ	USD	35.5 m	100		*	*/	/*\
Biochemie U.S., Inc., Broomfield, CO	USD	20.0 m	100		*		
Lek Pharmaceuticals, Inc., Wilmington, NC	USD	200,000	100		*		
Novartis Consumer Health, Inc., Parsippany, NJ	USD	465.9 m	100		*	*/	/*\
Novartis Animal Health US, Inc., Greensboro, NC	USD	25.0 m	100		*	*/	/*\
Novartis Animal Vaccines, Inc., Overland Park, KS	USD	115.0 m	100		*	*/	/*\
Novartis Nutrition Corporation, Minneapolis, MN	USD	68.8 m	100		*	*/	/*\
Gerber Products Company, Fremont, MI	USD	614.9 m	100	/*/	*	*/	/*\
Gerber Life Insurance Company, White Plains, NY	USD	28.2 m	100		*		
CIBA Vision Corporation, Duluth, GA	USD	368.4 m	100	/*/	*	*/	/*\
Venezuela							
Novartis de Venezuela, S.A., Caracas	VEB	1.4 bn	100		*		

In addition, the Group is represented by subsidiaries, associated companies or joint ventures in the following countries:

Algeria, Costa Rica, Dominican Republic, Guatemala, the former Yugoslav Republic of Macedonia, Morocco, New Zealand, Nigeria, Peru, Romania, Serbia and Montenegro and Uruguay.

Equity interest % above 50% and up to 100% of the voting rights fully consolidated;

above 20% and up to 50% of the voting rights investment in associated company equity method accounting.

(1) Share/paid-in capital may not reflect the taxable share/paid-in capital amount.

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32. Significant Differences Between IFRS and United States Generally Accepted Accounting Principles (US GAAP)

The Group's consolidated financial statements have been prepared in accordance with IFRS, which as applied by the Group, differs in certain significant respects from US GAAP. The effects of the application of US GAAP to net income and equity are set out in the tables below:

	Notes	2003	2002	2001
		($ millions)	($ millions)	($ millions)
Net income under IFRS		**5,016**	**4,725**	**3,836**
US GAAP adjustments:				
Purchase accounting: Ciba-Geigy	a	(339)	(294)	(190)
Purchase accounting: other acquisitions	b	(175)	(298)	(168)
Purchase accounting: IFRS goodwill amortization	c	172	140	
Available-for-sale securities and derivative financial instruments	d	(240)	(273)	(303)
Pension provisions	e	(18)	27	(185)
Share-based compensation	f	(273)	(120)	(22)
	g	(3)	(20)	(22)

	Notes	2003	2002	2001
Consolidation of share-based employee compensation foundation				
Deferred taxes	h	(63)	(93)	(18)
In-process research and development	i	(260)	(11)	(555)
Other	j	(20)	(95)	(22)
Deferred tax effect on US GAAP adjustments		(9)	141	68
Net income under US GAAP		**3,788**	**3,829**	**2,419**
Basic earnings per share under US GAAP ($)		1.59	1.58	0.98
Diluted earnings per share under US GAAP ($)		1.57	1.55	0.98

	Notes	December 31, 2003	December 31, 2002
		($ millions)	($ millions)
Equity under IFRS		**30,429**	**28,269**
US GAAP adjustments:			
Purchase accounting: Ciba-Geigy	a	3,131	3,113
Purchase accounting: other acquisitions	b	2,808	3,011
Purchase accounting: IFRS goodwill amortization	c	327	155
Pension provisions	e	1,209	1,072
Share-based compensation	f	(96)	(156)
Consolidation of share-based employee compensation foundation	g	(728)	(489)
Deferred taxes	h	(609)	(547)
In-process research and development	i	(1,338)	(984)
Other	j	(93)	(34)
Deferred tax effect on US GAAP adjustments		(162)	(185)
Equity under US GAAP		**34,878**	**33,225**

Components of equity in accordance with US GAAP

	December 31, 2003	December 31, 2002
	($ millions)	($ millions)
Share capital	1,017	1,025
Treasury shares, at nominal value	(151)	(158)
Share premium	743	2,759
Retained earnings	31,069	29,976
Accumulated other comprehensive income:		
Currency translation adjustment	1,940	(237)
Unrealized market value adjustment on available-for-sale securities, net of taxes of $(62) million (2002: $(6) million)	275	(253)
Unrealized market value adjustment on cash-flow hedges net of taxes of $7 million (2002: $30 million)	7	113
Minimum pension liability, net of taxes of $15 million	(22)	

	December 31, 2003	December 31, 2002
December 31	**34,878**	**33,225**

Changes in US GAAP equity

	($ millions)
January 1, 2001	**29,840**
Net unrealized market value adjustment	(236)
Increase in share premium related to share-based compensation	27
Associated companies' equity movement	4
Foreign currency translation adjustment	(619)
Net income for the year under US GAAP	2,419
Dividends paid	(1,268)
Acquisition of treasury shares	(2,348)
Issue of call and put options on Novartis shares	2,389
January 1, 2002	**30,208**
Net unrealized market value adjustment	(502)
Increase in share premium related to share-based compensation	17
Associated companies' equity movement	(104)
Foreign currency translation adjustment	4,158
Net income for the year under US GAAP	3,829
Dividends paid	(1,305)
Acquisition of treasury shares	(3,076)
January 1, 2003	**33,225**
Net unrealized market value adjustment	381
Increase in share premium related to share-based compensation	373
Minimum pension liability	(22)
Associated companies' equity movement	10
Foreign currency translation adjustment	2,735
Net income for the year under US GAAP	3,788
Dividends paid	(1,654)
Acquisition of treasury shares	(500)
Redemption of call and put options on Novartis shares	(3,458)
December 31, 2003	**34,878**

Notes to the US GAAP Reconciliation

a) Purchase accounting: Ciba-Geigy

The accounting treatment for the 1996 merger of Sandoz and Ciba-Geigy under IFRS is different from the accounting treatment under US GAAP. For IFRS purposes, the merger was accounted under the uniting of interests method, however, for US GAAP, the merger did not meet all of the required conditions of Accounting Principles Board Opinion No. 16 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 $28.5 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 2003, 2002 and 2001 are as follows:

	2003 Components to reconcile			2002 Components to reconcile			2001 Components to reconcile		
	Net income	Foreign currency translation adjustment	Equity	Net income	Foreign currency translation adjustment	Equity	Net income	Foreign currency translation adjustment	Equity
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
Intangible assets related to marketed products	(478)	472	4,121	(414)	708	4,127	(254)	(101)	3,833
Tangible fixed assets	51	(81)	(714)	44	(115)	(684)	41	16	(613)
Inventory		62	569		83	507		(10)	424
Other identifiable intangibles	(25)	9	73	(20)	16	89	(19)	(3)	93
Investments		15	135		20	120	(20)	(3)	100
Deferred taxes	113	(120)	(1,053)	96	(179)	(1,046)	62	25	(963)
Total adjustment	**(339)**	**357**	**3,131**	**(294)**	**533**	**3,113**	**(190)**	**(76)**	**2,874**

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 IFRS existing at that time. The adoption of IAS 22 (revised 1993) required that goodwill is capitalized and amortized, however, did not require prior period restatement. The material component of goodwill recorded directly to equity, under IFRS 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 $2,870 million as of December 31, 2003 and 2002.

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 are tested for impairment and

thereafter are 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 is no amortization charge in 2003 and 2002 under US GAAP.

In 2003, as a result of adverse changes in the operating environment of certain businesses, or of the decision to divest certain products, in accordance with SFAS 142, non-cash charges of $119 million were recorded (2002: $229 million) for impairments of goodwill and divestments. Gerber goodwill was also reviewed for potential impairments in 2003 however, this did not result in the Group needing to record a charge. The process of evaluating goodwill involves making judgments and estimates relating to the projection and discounting of future cash flows. This evaluation is sensitive to changes in the discount rate. An increase to discount rates is likely to result in a significant impairment charge under US GAAP.

Also included are US GAAP adjustments to the equity method accounting results of Roche and Chiron totaling $56 million (2002: $69 million). The impact of the additional impairment charges and the Roche and Chiron adjustments resulted in a $175 million charge in 2003 (2002: $298 million).

Note k (xi) provides further disclosure regarding impairment under US GAAP.

The expense of $168 million recorded in 2001 relates to goodwill amortization under US GAAP.

c) Purchase accounting: IFRS goodwill amortization

As described above, as of January 1, 2002, goodwill is no longer amortized but only subject to impairment testing under US GAAP. The corresponding reversal of the regular goodwill amortization under IFRS resulted in an additional income in the US GAAP reconciliation of $172 million (2002: $140 million).

d) Available-for-sale marketable securities and derivative financial instruments

Under IFRS, fair value changes which relate to the underlying movement in exchange rates on available-for-sale debt securities have to be recognized in the income statement. Under US GAAP, SFAS 133 requires the entire movement in the fair value of the securities to be recognized in equity, including any part that relates to foreign exchange movements. This resulted in US GAAP income being reduced by $228 million (2002: $53 million income; 2001: $28 million expense).

Prior to the adoption of IAS 39 from January 1, 2001 in the IFRS consolidated financial statements, investments were stated at the lower of cost or market value on an individual basis. This results in a different amount of unrealized gains or losses being recorded in the separate component of equity under US GAAP compared to IFRS and an additional expense under US GAAP on disposal of available-for-sale securities during 2003, 2002 and 2001. This resulted in an additional expense of $12 million (2002: $326 million; 2001: $119 million).

During 2001, an additional expense of $156 million was recognized to neutralize income on derivatives.

The above differences resulted in an additional US GAAP expense of $240 million in 2003 (2002: $273 million; 2001: $303 million).

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e) Pension provisions

Under IFRS, 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, IFRS and US GAAP accounting rules in this area are essentially the same, however, adjustments arise when reconciling from IFRS 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 IFRS and US GAAP for both pension and post-employment benefit plans:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Pension benefits:			
Net asset recognized for IFRS	3,046	2,786	2,227
Difference in unrecognized amounts	1,314	1,196	976
Net asset recognized for US GAAP	**4,360**	**3,982**	**3,203**
Net periodic (expense)/income recognized for IFRS	(54)	139	206
Difference in amortization of actuarial amounts	(35)	19	(142)
Net periodic pension benefit (expense)/income recognized for US GAAP	**(89)**	**158**	**64**
Other post-employment benefits:			
Liability recognized for IFRS	(460)	(421)	(416)
Difference in unrecognized amounts	(105)	(124)	(122)
Liability recognized for US GAAP	**(565)**	**(545)**	**(538)**
Net periodic benefit expense recognized for IFRS	(63)	(54)	(43)
Difference in amortization of actuarial amounts	17	8	(43)
Net periodic post-employment benefit costs recognized for US GAAP	**(46)**	**(46)**	**(86)**
Total US GAAP income statement difference on pensions and other post-employment benefits	**(18)**	**27**	**(185)**

f) Share-based compensation

The Group does not account for share-based compensation, as it is not required under IFRS. 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 old and new Swiss Employee Share Ownership Plans, the Restricted Share Plan and the US Management ADS Appreciation Cash Plan.

Compensation expense recognized under the Long-Term Performance Plan was $29 million for the year ended December 31, 2003 (2002: $14 million; 2001: $7 million).

The Leveraged Share Savings Plan is considered to be compensatory based on the fair value of the allocated Novartis AG 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 $16 million for 2003 (2002: $11 million; 2001: $10 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 $176 million for the year ended December 31, 2003 (2002: $80 million).

The old Swiss ESOP was considered to be compensatory based on the amount of the discount allowed for employee share purchases. Compensation expense was recorded at the grant date and was 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, which has resulted in a compensation expense of $13 million (2001: $27 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%), which was the last year, in which employees could purchase shares under this scheme.

The Restricted Share Plan is 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 this plan was $5 million for the year ended December 31, 2003 (2002: $4 million).

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. Compensation expense for this plan was $47 million for 2003 (2002: $2 million income; 2001: $22 million income). This plan was supplemented in 2001 by the US ADS Incentive Plan which grants options on Novartis ADSs. Disclosures relating to this Plan is included in note k (vii).

The total US GAAP expense of the above items is as follows:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Long-Term Performance Plan	29	14	7
Leveraged Share Savings Plan	16	11	10
New Swiss ESOP Plan	176	80	
Old Swiss ESOP Plan		13	27
Restricted Share Plan	5	4	
ADS Appreciation Cash Plan	47	(2)	(22)
Total US GAAP additional compensation expense	**273**	**120**	**22**

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 IFRS. However, this foundation is consolidated under US GAAP.

The consolidation of this foundation reduces net income by $3 million (2002: $20 million; 2001: $22 million) and US GAAP equity by $728 million (2002: $489 million).

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 that the tax effect is calculated with reference to the local tax rate in the seller's or manufacturer's jurisdiction.

i) In-process research and development (IPR&D)

Under US GAAP, IPR&D is considered to be a separate asset that needs to be written-off immediately following the acquisition as the feasibility of the acquired research and development has not been fully tested and the technology has no alternative future use. IFRS does not consider that IPR&D is an intangible asset that can be separately recognized, accordingly it is recognized in goodwill.

During 2003, IPR&D has been identified for US GAAP purposes in connection with acquisitions, principally the acquisition of 51% of the shares of Idenix. All projects of Idenix are under research or development, therefore the full goodwill recorded under IFRS amounting to $297 million was considered as IPR&D under US GAAP. IPR&D recognized on other acquisitions amounted to $39 million in 2003.

During 2002, IPR&D arose on the acquisitions of a further 11.4% of the voting shares of Roche ($123 million), of 99% of the shares of Lek ($84 million), and of others ($17 million). During 2001, IPR&D arose on the acquisition of the Roche voting shares ($211 million), the purchase of pitavastatin marketing rights ($300 million) and other net IPR&D expenses ($44 million).

The income booked for the reversal of the amortization of IPR&D recorded under IFRS as a component of goodwill amortization amounted to $76 million (2002: $213 million). The total net IPR&D expense for 2003 was $260 million (2002: $11 million; 2001: $555 million).

The impact of IPR&D reduced US GAAP equity by $1,338 million December 31, 2003 (2002: $984 million).

j) Other

There are also differences between IFRS and US GAAP in relation to (1) capitalized interest and capitalized software, (2) accretion on convertible debentures, (3) LIFO inventory and (4) minimum pension liability. 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 IFRS carrying values.

(ii) Cash, cash equivalents and time deposits

	2003	2002
	($ millions)	($ millions)
Carrying value of cash and cash equivalents under IFRS	5,646	5,798
Carrying values of time deposits under IFRS (Note 16)	651	767
Change due to consolidation of share-based compensation foundation under US GAAP	(650)	(622)
Total under US GAAP	**5,647**	**5,943**

(iii) Marketable securities

	2003	2002
	($ millions)	($ millions)
Carrying values of marketable securities under IFRS (Note 16)	6,134	5,496
Carrying values of other investments under IFRS	1,076	896
Marketable securities in share-based compensation foundation consolidated under US GAAP	16	129
Total under US GAAP	**7,226**	**6,521**

The components of available-for-sale marketable securities under US GAAP at December 31, 2003 and 2002 are the following:

	Cost	Gross unrealized gains	Gross unrealized losses	Carrying value and estimated fair value
	($ millions)	($ millions)	($ millions)	($ millions)
As of December 31, 2003				
Available-for-sale securities:				
Equity securities	1,744	209	(293)	1,660
Debt securities	5,299	270	(3)	5,566
Total	**7,043**	**479**	**(296)**	**7,226**
As of December 31, 2002				
Available-for-sale securities:				
Equity securities	2,022	212	(571)	1,663
Debt securities	4,797	91	(30)	4,858
Total	**6,819**	**303**	**(601)**	**6,521**

Proceeds from sales of available-for-sale securities were $6,293 million and $6,086 million in 2003 and 2002 respectively. Gross realized gains were $199 million and $266 million on those sales in 2003 and 2002 respectively. Gross realized losses were $115 million and $648 million on those sales in 2003 and 2002, respectively. The cost used to determine the gain or loss on these sales was calculated using the weighted average method. As at December 31, 2003 $258 million of gross unrealized losses of equity securities existed for more than 12 months.

The maturities of the available-for-sale debt securities included above at December 31, 2003 are as follows:

	2003
	($ millions)
Within one year	34
Over one year through five years	4,447
Over five years through ten years	629
Over ten years	456
Total	**5,566**

(iv) Derivative financial instruments

From January 1, 2001, the Group adopted SFAS 133 *Accounting for Derivative Instruments and Hedging Activities* which as applied by the Group is consistent with IAS 39 as regards accounting for cash flow hedges.

In 2003, there were no gains and losses in accordance with US GAAP on options settled in Novartis shares that require a net cash settlement (2002: $123 million of gains; 2001: $229 million of losses).

(v) Non-derivative financial instruments

The US GAAP carrying values are equivalent to the IFRS 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 IFRS consolidated financial statements.

(vi) Earnings per share

As discussed in item g) above, in the past, the Group established the Novartis Foundation for Employee Participation 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 this Foundation. The cost of Novartis AG shares held by the Foundation is shown as a reduction of shareholders' equity in the Group's US GAAP 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:

	2003	2002	2001
Basic earnings per share:			
Net income under US GAAP ($ millions)	**3,788**	**3,829**	**2,419**
Weighted average number of shares in issue under IFRS	2,473,522,565	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	(93,430,809)	(97,164,490)	(100,569,059)
Weighted average number of shares in issue under US GAAP	**2,380,091,756**	**2,418,147,195**	**2,471,104,306**
Basic earnings per share under US GAAP ($)	**1.59**	**1.58**	**0.98**

	2003	2002	2001
Diluted earnings per share:			
Net income under US GAAP ($ millions)	**3,788**	**3,829**	**2,419**
Elimination of interest expense on convertible debt (net of tax effect)		3	12
	3,788	**3,832**	**2,431**

	2003	2002	2001
Net income used to determine diluted earnings per share			
Weighted average number of shares in issue under IFRS	2,473,522,565	2,515,311,685	2,571,673,365
Adjustment for assumed conversion of convertible debt			9,478,158
Call options on Novartis shares	27,446,092	54,891,036	4,574,401
Adjustment for other dilutive share options	4,346,940	2,264,236	1,010,963
Weighted average number of treasury shares due to consolidation of the employee share participation foundation under US GAAP	(93,430,809)	(97,164,490)	(100,569,059)
Weighted average number of shares for diluted earnings per share under US GAAP	**2,411,884,788**	**2,475,302,467**	**2,486,167,828**
Diluted earnings per share under US GAAP ($)	**1.57**	**1.55**	**0.98**

(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:

	2003	2002	2001
Net income under US GAAP ($ millions):			
As reported	3,788	3,829	2,419
Stock-based employee compensation cost included in the determination of net income	273	120	22
Stock-based employee compensation cost that would have been included in the determination of net income if the fair value based method had been applied to all awards	(459)	(210)	(45)
Pro forma	3,602	3,739	2,396
Earnings per share ($):			
As reported:			
Basic	1.59	1.58	0.98
Diluted	1.57	1.55	0.98
Pro forma:			
Basic	1.51	1.55	0.97
Diluted	1.49	1.51	0.97

The weighted average assumptions used in determining the fair value of option grants were as follows:

	2003	2002	2001
Dividend yield	1.8%	1.8%	1.2%
Expected volatility	24.0%	24.0%	24.0%
Risk-free interest rate	4.0%	4.0%	4.0%
Expected life	9 yrs	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, 2003 and 2002 comprises $1,590 million and $1,074 million of current assets and $987 million and $630 million of non-current assets respectively. The deferred tax liability at December 31, 2003 and 2002 comprises $1,202 million and $954 million of current liabilities and $3,935 million and $3,208 million of non-current liabilities respectively.

(ix) Employee benefit plans

The disclosures required by US GAAP are different from those provided under IFRS. The following provides a reconciliation of benefit obligations, plan assets and funded status of the plans.

	Pension benefits			Other post-employment benefits		
	2003	**2002**	**2001**	**2003**	**2002**	**2001**
	($ millions)					
Plan assets at fair value:						
January 1	**14,365**	**13,914**	**15,513**			
Actual return on plan assets	916	(1,173)	(439)			
Foreign currency translation	1,506	2,283	(340)			
Employer contributions	92	83	65			
Employee contributions	39	6	20			
Plan amendments		11	(214)			
Benefit payments	(790)	(759)	(691)			
December 31	**16,128**	**14,365**	**13,914**			
Benefit obligation:						
January 1	**11,845**	**11,087**	**10,776**	**645**	**504**	**402**
Service cost	285	277	214	19	14	9
Interest cost	559	552	491	40	36	32
Actuarial (gain) loss	695	(1,108)	821	85	131	101
Plan amendments	15	12	(260)	(31)	(2)	(2)
Foreign currency translation	1,256	1,784	(264)	2		
Benefit payments	(790)	(759)	(691)	(40)	(38)	(38)
December 31	**13,865**	**11,845**	**11,087**	**720**	**645**	**504**
Funded status	**2,263**	**2,520**	**2,827**	**(720)**	**(645)**	**(504)**
Unrecognized actuarial (gain) loss	2,146	1,462	376	204	100	(34)
Unrecognized past service costs	(49)			(49)		
December 31 Prepaid (accrued) benefit costs	**4,360**	**3,982**	**3,203**	**(565)**	**(545)**	**(538)**
Prepaid benefit costs	5,333	4,704	3,853			
Accrued benefit liability	(973)	(722)	(650)	(565)	(545)	(538)
December 31 Net amount recognized in the balance sheet	**4,360**	**3,982**	**3,203**	**(565)**	**(545)**	**(538)**

	Pension benefits			Other post-employment benefits		
Benefit expense:						
Service cost	285	277	214	19	14	9
Interest cost	559	552	491	40	36	32
Past service costs	27			7		
Expected return on plan assets	(796)	(970)	(904)			
Employee contributions	(39)	(7)	(20)			
Amortization of actuarial (gain) loss	53	(10)	155	(20)	(4)	45
Net periodic benefit (income)/expense	**89**	**(158)**	**(64)**	**46**	**46**	**86**

	Pension benefits			Other post-employment benefits		
	2003	**2002**	**2001**	**2003**	**2002**	**2001**
	%	%	%	%	%	%
Weighted-average assumptions as at December 31:						
Discount rate	4.6	4.5	4.6	6.3	6.8	7.5
Rate of payroll indexation	2.8	2.8	2.8			
Expected return on plan assets	5.6	6.1	6.1			

In 2001, the Group recorded $64 million of settlement gains associated with Group restructurings.

The assumed health care cost trend rate at December 31, 2003 was 9%, decreasing to 4.75% in 2012. The assumed health care cost trend rate at December 31, 2002 was 10%, 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 2003 would have the following effects:

	1% point increase	1% point decrease
	($ millions)	($ millions)
Effects on total of service and interest cost components	9	(7)
Effect on post-employment benefit obligations	81	(68)

On December 23, 2003, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 132 (revised 2003), *Employers' Disclosures about Pensions and Other Post-retirement Benefits, an amendment of FASB Statements No. 87, 88 and 106, and a revision of FASB Statement No. 132*. This requires the following additional information for the Swiss defined benefit plan:

Plan assets

Novartis Swiss defined benefit plan asset weighted-average allocations at December 31, 2003, and 2002, and 2004 target allocations by asset category are as follows:

Target Allocation	Percentage of Plan Assets	
2004	**2003**	**2002**

	Target Allocation	Percentage of Plan Assets	
	(%)	(%)	(%)
Asset Category			
Equity securities	25	15	27
Debt securities	57	63	56
Real estate	10	10	10
Cash and cash equivalents	8	12	7
Total	**100**	**100**	**100**

Long-term policy targets are set by the Novartis Investment Committee. Based upon current market and economic environments, actual asset allocation may periodically deviate from policy targets as determined by the Investment Committee.

Plan assets, benefit obligation and funded status of the Swiss defined benefit plan at December 31, 2003, 2002 and 2001:

	2003	2002	2001
	($ millions)	($ millions)	($ millions)
Plan assets at fair value at January 1	**11,771**	**11,164**	**12,441**
Actual return on plan assets	571	(986)	(221)
Foreign currency translation	1,451	2,190	(296)
Employee contributions	29	2	15
Plan amendments			(266)
Benefit payments	(604)	(599)	(509)
December 31	**13,218**	**11,771**	**11,164**
Benefit obligation at January 1	**8,569**	**8,173**	**8,110**
Service cost	137	139	108
Interest cost	358	379	319
Actuarial (gain)/loss	240	(1,126)	639
Plan amendments			(302)
Foreign currency translation	1,093	1,603	(192)
Benefit payments	(604)	(599)	(509)
December 31	**9,793**	**8,569**	**8,173**
Funded Status	**3,425**	**3,202**	**2,991**
Unrecognized actuarial (gain)/loss	1,285	851	215
December 31 Prepaid benefit recognized in the balance sheet	**4,710**	**4,053**	**3,206**

The accumulated benefit obligation for the Swiss defined benefit plan was $8,248 million and $7,302 million at December 31, 2003, and 2002, respectively.

Cash Flows

Novartis does not expect to contribute to its Swiss defined benefit plan in 2004 (nil in 2003 and 2002).

Estimated future benefit payments

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

Year	$ millions
2004	600
2005	587
2006	575
2007	563
2008	558
2009 2013	2,738

Assumptions

The following are the principal actuarial assumptions, used for calculating the 2003, 2002 and 2001 income statement amounts and the above stated December 31, 2003 and 2002 funded status of the Swiss defined benefit plans:

	Income statement			Funded status	
	2003	2002	2001	2003	2002
	%	%	%	%	%
Weighted average %					
Discount rate	4.00	4.00	4.00	3.75	4.00
Payroll indexation	2.50	2.50	2.50	2.50	2.50
Return on assets	5.00	5.50	5.50	5.00	5.50

The overall expected long-term return on plan assets was determined based on outside published and internal capital market forecasts for each asset class. The measurement date used to determine pension benefit measurements for the Swiss defined benefit plan was December 31, 2003.

(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 SFAS 142, *Goodwill and Other Intangible Assets.* 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.

All goodwill components were tested for impairment during 2003. The fair values of the businesses were determined using the expected present values of future cash flows.

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.

The changes in the carrying amount of goodwill for the year ended December 31, 2003 and 2002 are as follows:

			Consumer Health Business Units							
	Pharmaceuticals Division	Consumer Health Division	Sandoz	OTC	Animal Health	Medical Nutrition	Infant & Baby	CIBA Vision	Corporate	Total
	($ millions)									
January 1, 2002	**404**	**3,809**	**430**	**2**	**84**	**96**	**2,890**	**307**	**6**	**4,219**
Additions		534	429	20	85					534
Impairment losses	(345)	(30)				(16)	(14)		(6)	(381)
Goodwill written off related to disposal of business		(40)				(40)				(40)
Consolidation changes	(10)	54					54			44
Translation effects	18	72	62	(2)	7	15	(10)			90
December 31, 2002	**67**	**4,399**	**921**	**20**	**176**	**55**	**2,920**	**307**		**4,466**
Additions		7				7				7
Reclassification to separately identified intangible assets		(423)	(425)			2				(423)
Impairment losses	(12)	(179)	(170)		(8)			(1)		(191)
Goodwill written off related to disposal of business	(35)	(5)			(5)					(40)
Translation effects	2	116	102	4	9	6	(5)			118
December 31, 2003	**22**	**3,915**	**428**	**24**	**172**	**70**	**2,915**	**306**		**3,937**

Adjusted net income:

	December 31, 2003	December 31, 2002	December 31, 2001
	($ millions)	($ millions)	($ millions)
Reported net income	3,788	3,829	2,419
Add back: Goodwill amortization			188
Adjusted net income	3,788	3,829	2,607

Basic earnings per share:

	December 31, 2003	December 31, 2002	December 31, 2001
	($ millions)	($ millions)	($ millions)
Reported basic EPS	1.59	1.58	0.98
Goodwill amortization			0.08

	December 31, 2003	December 31, 2002	December 31, 2001
Adjusted basic EPS	1.59	1.58	1.06

Diluted earnings per share:

	December 31, 2003	December 31, 2002	December 31, 2001
	($)	($)	($)
Reported diluted EPS	1.57	1.55	0.98
Goodwill amortization			0.08
Adjusted diluted EPS	1.57	1.55	1.06

(xii) Effect of New Accounting Pronouncements: International Financial Reporting Standards

In December 2003, the IASB released revised IAS 32, *Financial Instruments: Disclosure and Presentation* and IAS 39, *Financial Instruments: Recognition and Measurement*. These standards replace IAS 32 (revised 2000), and supersedes IAS 39 (revised 2000), and should be applied for annual periods beginning on or after January 1, 2005. The amendments are not expected to have a material impact on the Group's consolidated financial statements.

In December 2003, as a part of the IASB's project to improve International Accounting Standards, the IASB released revisions to the following standards that supersede the previously released versions of those standards: IAS 1, *Presentation of Financial Statements*; IAS 2, *Inventories*; IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; IAS 10, *Events after Balance Sheet Date*; IAS 16, *Property, Plant and Equipment*; IAS 17, *Leases*; IAS 21, *The Effects of Changes in Foreign Exchange Rates*; IAS 24,

Related Party Disclosures; IAS 27, *Consolidated and Separate Financial Statements*; IAS 28, *Investments in Associates*; IAS 31, *Interests in Joint Ventures*; IAS 33, *Earnings per Share* and IAS 40, *Investment Property*. The revised standards should be applied for annual periods beginning on or after January 1, 2005. The amendments are not expected to have a material impact on the Group's consolidated financial statements.

(xiii) Effect of New Accounting Pronouncements: US GAAP

In January 2003, the Emerging Issues Task Force (EITF) issued EITF 00-21, *Accounting for Reserve Arrangements with Multiple Deliverables*. EITF 00-21 addresses the issues of (1) how to determine whether an arrangement involving multiple deliverables contains more than one unit of accounting and (2) how arrangement consideration should be measured and allocated to the separate units of accounting in the arrangement. EITF 00-21 does not change otherwise applicable revenue recognition criteria. EITF 00-21 is effective for revenue arrangements entered into in financial periods beginning after June 15, 2003. EITF 00-21 had no impact on the Group's consolidated financial position or results of operations.

In April 2003, the FASB issued Statement of Financial Accounting Standards No. 149 (SFAS 149) *Amendment of Statement 133 on Derivative Instruments and Hedging Activities*. SFAS 149 amends and clarifies financial accounting and reporting for derivative instruments and for hedging activities under *Accounting for Derivative Instruments and Hedging Activities* (SFAS 133). The adoption of SFAS 149 did not have a material impact on the Group's consolidated results of operation or financial position.

In May 2003, the FASB issued SFAS 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. The adoption of SFAS 150 did not have a material impact on the Group's consolidated results of operation or financial position.

In December 2003, *the Medicare Prescription Drug, Improvements and Modernization Act of 2003* (the Medicare Art) was approved in the United States. The Medicare Act provides for two new prescription drug benefit features under Medicare. The Group provides post-retirement benefits to its United States employees, the benefits provided are impacted by the Medicare Act. SFAS 106, *Employers' Accounting for Post-retirement Benefits Other Than Pensions*, requires that enacted changes in the law that take effect in future periods and that will affect the future level of benefit coverage be considered in the current period measurements for benefits expected to be provided in those future periods. In response to the Medicare Act and the requirements of SFAS 106, the Financial Accounting Standards Board (FASB) released FASB Staff Position No. 106-1 *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* (FSP 106-1).

FSP 106-1 provides a one-time election to defer accounting for the effects of the Medicare Act until further guidance on the accounting for the new Medicare features is released. The Group has elected to defer the accounting for the effects of the Medicare Act. Accordingly, the Group's consolidated financial statements and the accompanying notes as of and for the year ended December 31, 2003 do not reflect the effects of the Medicare Act. Further guidance, when issued, could require the Group to change previously reported information.

FIN 46 *Consolidation of Variable Interest Entities* is effective for Novartis starting January 1, 2004. The Group is in the process of assessing what impact this pronouncement will have on its consolidated financial statements when adopted. Based on a preliminary analysis of the impact of FIN 46, the Group has concluded the impact on the consolidated financial statements is not expected to be material.

Report of Independent Auditors on Financial Statement Schedule

To the Shareholders and Board of Directors
of the Novartis Group, Basel

Our audits of the consolidated financial statements referred to in our report dated January 20, 2004, appearing on page F-2 of this Form 20-F, also included an audit of the financial statement schedule listed in Item 18 of this Form 20-F. In our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

As discussed in Note 1 to the consolidated financial statements, the Novartis Group began presenting its results in US dollars effective January 1, 2003 and has restated prior periods for comparison purposes.

PricewaterhouseCoopers AG

/s/ J.G. KAISER	/s/ D. SUTER
J.G. Kaiser	D. Suter

Basel, January 20, 2004

Novartis Group

Schedule II Valuation and qualifying accounts

(for the years ended December 31, 2003, 2002 and 2001)

	Balance at beginning of period	Additions	Deductions[1]	Translation effects	Balance at end of period
			($ millions)		
Descriptions:					
Year ended December 31, 2003:					
Provision for doubtful receivables	(218)	(89)	98	(18)	(227)
Provision for inventories	(252)	(196)	247	(37)	(238)
Allowance for deferred taxes	(145)	(44)	3		(186)
	(615)	**(329)**	**348**	**(55)**	**(651)**
Year ended December 31, 2002:					
Provision for doubtful receivables	(175)	(114)	78	(7)	(218)
Provision for inventories	(219)	(288)	260	(5)	(252)
Allowance for deferred taxes	(58)	(101)	33	(19)	(145)
	(452)	**(503)**	**371**	**(31)**	**(615)**
Year ended December 31, 2001:					
Provision for doubtful receivables	(151)	(86)	59	3	(175)
Provision for inventories	(134)	(290)	203	2	(219)
Allowance for deferred taxes	(145)	(18)	101	4	(58)
	(430)	**(394)**	**363**	**9**	**(452)**

(1) Represents amounts used for the purposes for which the accounts were created and reversal of amounts no longer required.

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