NOVARTIS AG
Form 20-F
January 31, 2007

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As filed with the Securities and Exchange Commission on January 31, 2007

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, 2006

OR

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

OR

o SHELL COMPANY 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 or to be 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:

2,348,231,459 shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ý No o

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes o No ý

Note checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those sections.

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 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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (Check one):

Large accelerated filer ý **Accelerated filer o** **Non-accelerated filer o**

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 o Item 18 ý

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes o No ý

TABLE OF CONTENTS

INTRODUCTION AND USE OF CERTAIN TERMS			1
FORWARD-LOOKING STATEMENTS			1
PART I			2
	Item 1.	Identity of Directors, Senior Management and Advisers	2
	Item 2.	Offer Statistics and Expected Timetable	2
	Item 3.	Key Information	2
	3.A	Selected Financial Data	2
	3.B	Capitalization and Indebtedness	5
	3.C	Reasons for the offer and use of proceeds	5
	3.D	Risk Factors	6
	Item 4.	Information on the Company	12
	4.A	History and Development of Novartis	12
	4.B	Business Overview	15
		Pharmaceuticals	16
		Vaccines and Diagnostics	57
		Sandoz	64
		Consumer Health	71
	4.C	Organizational Structure	78
	4.D	Property, Plants and Equipment	78
Item 4A.		Unresolved Staff Comments	85
	Item 5.	Operating and Financial Review and Prospects	85
	5.A	Operating Results	85
	5.B	Liquidity and Capital Resources	126
	5.C	Research & Development, Patents and Licenses	130
	5.D	Trend Information	130
	5.E	Off-Balance Sheet Arrangements	130
	5.F	Aggregate Contractual Obligations	130
	Item 6.	Directors, Senior Management and Employees	133
	6.A	Directors and Senior Management	133
	6.B	Compensation	141
	6.C	Board Practices	155
	6.D	Employees	167
	6.E	Share Ownership	168
	Item 7.	Major Shareholders and Related Party Transactions	169
	7.A	Major Shareholders	169
	7.B	Related Party Transactions	170
	7.C	Interests of Experts and Counsel	171
	Item 8.	Financial Information	171
	8.A	Consolidated Statements and Other Financial Information	171
	8.B	Significant Changes	171
	Item 9.	The Offer and Listing	172
	9.A	Listing Details	172
	9.B	Plan of Distribution	173
	9.C	Market	173
	9.D	Selling Shareholders	173

9.E	Dilution	173
9.F	Expenses of the Issue	173
Item 10.	Additional Information	173
10.A	Share capital	173
10.B	Memorandum and Articles of Association	173
10.C	Material contracts	178
10.D	Exchange controls	178
10.E	Taxation	178
10.F	Dividends and paying agents	183
10.G	Statement by experts	183
10.H	Documents on display	183
10.I	Subsidiary Information	184
Item 11.	Quantitative and Qualitative Disclosures about Non-Product-Related Market Risk	184
Item 12.	Description of Securities other than Equity Securities	188
PART II		189
Item 13.	Defaults, Dividend Arrearages and Delinquencies	189
Item 14.	Material Modifications to the Rights of Security Holders and Use of Proceeds	189
Item 15.	Controls and Procedures	189
Item 16A.	Audit Committee Financial Expert	190
Item 16B.	Code of Ethics	190
Item 16C.	Principal Accountant Fees and Services	190
Item 16D.	Exemptions from the Listing Standards for Audit Committees	192
Item 16E.	Purchases of Equity Securities by the Issuer and Affiliated Purchasers	192
PART III		193
Item 17.	Financial Statements	193
Item 18.	Financial Statements	193
Item 19.	Exhibits	194

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, 2006. In this Form 20-F, references to "US dollars", "USD" 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 the European Union and its 25 member states 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 subsidiaries; 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 licensed to or owned by Group companies. Product names identified by a "®" or a " " are trademarks which are not licensed to or owned by the Group. 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 registered holders of Novartis AG 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 US Generally Accepted Accounting Principles ("US GAAP"). See "Item 18. Financial Statements note 33" 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, which can be identified by the use of forward-looking terminology such as "will" or "expected", or similar expressions, or by express or implied discussions regarding potential new products, potential new indications for existing products, or regarding potential future revenues from such products, potential future expenditures or liabilities, or by discussions of strategy, plans or intentions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different from any future results, performance or achievements expressed or implied by such statements. There can be no guarantee that any of the development projects described will succeed or that any new products or indications will be brought to market. Similarly, there can be no guarantee that Novartis or any future product or indication will achieve any particular level of revenue. In particular, management's expectations could be affected by, among other things, uncertainties involved in the development of new pharmaceutical products, including unexpected clinical trial results; unexpected regulatory actions or delays or government regulation generally; the company's ability to obtain or maintain patent or other proprietary intellectual property protection; competition in general; government, industry, and general public pricing pressures; uncertainties regarding necessary levels of expenditures in the future; and uncertainties regarding judicial or other investigatory proceedings. 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 provide the information in this 20-F as of the date of its filing. 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 for the years ended December 31, 2006, 2005 and 2004 are included elsewhere in this Form 20-F.

In order to assist our investors and analysts in their understanding of our results by having comparable information, 2004 pro forma consolidated income and cash flow statements are provided that include additional adjustments compared to the audited 2004 consolidated income and cash flow statements. We present pro forma financial statements because we adopted a number of new International Financial Reporting Standards from January 1, 2005 and not all of the new standards required retrospective application. In addition, the results of our Medical Nutrition Business Unit are shown as discontinuing operations for all periods, following our decision in 2006 to divest this business. See "Item 5. Operating and Financial Review and Prospects 5.A Operating Results Factors Affecting Comparability of Year-on-Year Results of Operations" for a more detailed discussion.

All financial data should be read in conjunction with "Item 5. Operating and Financial Review and Prospects". All financial data presented in this Form 20-F are qualified in their entirety by reference to the consolidated financial statements and such notes.

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 33."

	Year Ended December 31,					
	2006	2005	2004[1] Pro Forma	2004[2]	2003[2]	2002[2]
	($ millions, except per share information)					
INCOME STATEMENT DATA						
Amounts in accordance with IFRS:						
Net sales from continuing operations	**36,031**	**31,005**	**27,126**	**27,126**	**24,049**	**19,957**
Operating income from continuing operations	**7,949**	**6,802**	**6,243**	**6,117**	**5,553**	**4,884**
Income/(loss) from associated companies	264	193	177	68	(279)	(18)
Financial income	354	461	488	486	621	807
Interest expense	(266)	(294)	(261)	(261)	(243)	(214)
Income before taxes from continuing operations	**8,301**	**7,162**	**6,647**	**6,410**	**5,652**	**5,459**
Taxes	(1,282)	(1,090)	(1,072)	(1,045)	(919)	(917)
Net income from continuing operations	**7,019**	**6,072**	**5,575**	**5,365**	**4,733**	**4,542**
Net income from discontinuing operations	183	69	26	15	54	136
Group net income	**7,202**	**6,141**	**5,601**	**5,380**	**4,787**	**4,678**
Attributable to Shareholders of Novartis AG	7,175	6,130	5,586	5,365	4,743	4,664
Minority interests	27	11	15	15	44	14
Operating income from discontinuing operations	225	103	35	46	82	144
Basic earnings per share in $:						
Continuing operations earnings per share in $	2.98	2.60	2.36	2.27	1.97	1.87
Discontinuing operations earnings per share in $	0.08	0.03	0.01	0.01	0.02	0.06
Total earnings per share in $	3.06	2.63	2.37	2.28	1.99	1.93
Diluted earnings per share in $:						
Continuing operations diluted earnings per share in $	2.96	2.59	2.35	2.26	1.95	1.84
Discontinuing operations diluted earnings per share in $	0.08	0.03	0.01	0.01	0.02	0.05
Total diluted earnings per share in $	3.04	2.62	2.36	2.27	1.97	1.89
Cash dividends[3]	2,049	2,107	1,896	1,896	1,659	1,311
Cash dividends per share in CHF[4]	1.35	1.15	1.05	1.05	1.00	0.95
Operating income from continuing operations per share in $:						
Basic earnings per share in $	3.39	2.92	2.65	2.60	2.33	2.02
Diluted earnings per share in $	3.37	2.90	2.64	2.58	2.30	1.97

(1) Data is pro forma. See "Item 5.A Operating Results."

(2) We adopted a number of new International Financial Reporting Standards from January 1, 2005 not all of which required retrospective application. Data for 2004, 2003 and 2002 is therefore not comparable with 2006, 2005 and 2004 pro forma.

(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 2006 will be proposed to the Annual General Meeting on March 6, 2007 for approval.

	Year Ended December 31,				
	2006	**2005**	**2004**	**2003**	**2002**
	($ millions, except per share data)				
BALANCE SHEET DATA					
Amounts in accordance with IFRS:					
Cash, cash equivalents and current marketable securities	7,955	10,933	13,892	12,621	12,050
Inventories	4,498	3,725	3,558	3,346	2,963
Other current assets	8,215	6,785	6,470	5,677	5,316
Non-current assets	46,604	36,289	28,568	26,734	24,012
Assets related to discontinuing operations	736				
Total assets	**68,008**	**57,732**	**52,488**	**48,378**	**44,341**
Trade accounts payable	2,487	1,961	2,020	1,665	1,266
Other current liabilities	13,540	13,367	9,829	8,254	7,560
Non-current liabilities	10,480	9,240	9,324	9,416	8,064
Liabilities related to discontinuing operations	207				
Total liabilities	**26,714**	**24,568**	**21,173**	**19,335**	**16,890**
Total equity available to Novartis AG shareholders	41,111	32,990	31,177	28,953	27,385
Minority interests	183	174	138	90	66
Total equity	**41,294**	**33,164**	**31,315**	**29,043**	**27,451**
Total liabilities and equity	**68,008**	**57,732**	**52,488**	**48,378**	**44,341**
Net assets	41,294	33,164	31,315	29,043	27,451
Outstanding share capital	850	848	849	862	863
Amounts in accordance with US GAAP:					
Income statement data					
Net income from continuing operations	5,150	5,121	4,778	3,570	3,680
Net income discontinuing operations	114	69	15	54	136
Group net income	5,264	5,190	4,793	3,624	3,816
Continuing operations earnings per share in $	2.19	2.19	2.02	1.50	1.52
Discontinuing operations earnings per share in $	0.05	0.03	0.01	0.02	0.06
Total earnings per share in $	2.24	2.22	2.03	1.52	1.58
Continuing operations diluted earnings per share in $	2.18	2.19	2.01	1.48	1.49
Discontinuing operations diluted earnings per share in $	0.05	0.03	0.01	0.02	0.05
Total diluted earnings per share in $	2.23	2.22	2.02	1.50	1.54
Balance sheet data					
Total equity	41,670	38,300	37,733	34,568	32,950
Total assets	68,849	65,101	59,843	56,200	50,016

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 per share	Total Dividend per ADS
		(CHF)	($)
2002	March 2003	0.95	0.68
2003	February 2004	1.00	0.80
2004	March 2005	1.05	0.93
2005	February 2006	1.15	087
2006[1][2]	March 2007	1.35	1.11

(1) If the Swiss franc amount for 2007 is translated into US dollars at the rate of $0.82 to the Swiss franc, the Total Dividend per share and Total Dividend per ADS in US dollars would be $1.11. This translation is an example only, and should not be construed as a representation that the Swiss franc amount represents, or has been or could be converted into US dollars at that or any other rate.

(2) Dividend to be proposed at the Annual General Meeting on March 6, 2007 and paid in March 2007.

Exchange Rates

The following table shows, for the years and dates indicated, certain information concerning the rate of exchange of US dollar per Swiss franc based on exchange rate information found on Reuters Market System. The exchange rate in effect on January 25, 2007, as found on Reuters Market System, was CHF 1.00 = $0.80.

Year ended December 31,	Period End	Average[1]	Low	High
2002	0.71	0.65	0.58	0.72
2003	0.80	0.75	0.70	0.81
2004	0.88	0.81	0.76	0.88
2005	0.76	0.80	0.75	0.88
2006	0.82	0.80	0.76	0.84
Month end,				
August 2006			0.80	0.82
September 2006			0.79	0.81
October 2006			0.79	0.80
November 2006			0.80	0.83
December 2006			0.82	0.84
January 2007[2]			0.80	0.82

(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 25, 2007.

3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the offer and use of proceeds

Not applicable.

3.D Risk Factors

Our business faces significant risks and uncertainties. You should carefully consider all of the information set forth in this annual report on Form 20-F and in our other filings with the SEC before deciding to invest in any Novartis securities, including the following risk factors faced by us and our industry. Our business, financial condition or results of operations could be materially adversely affected by any of these risks as well as other risks and uncertainties not currently known to us or which we presently deem immaterial.

Risks Facing Our Business

Our business is significantly affected by ongoing pricing pressures.

Our business and the healthcare industry in general are significantly affected by ongoing pricing pressures. These pricing pressures include government-imposed industry-wide price reductions, mandatory reference prices, an increase in parallel imports, the shifting of the payment burden to patients through higher co-payments, mandatory substitution of generic drugs and growing pressure on physicians to reduce the prescribing of patented prescription medicines. We expect these efforts to continue as governments, healthcare providers, insurance companies and other stakeholders step up initiatives to reduce the overall cost of healthcare to patients, restrict the prescribing of new medicines, increase the use of generics and impose overall price cuts. These initiatives do not only affect the results of our Pharmaceuticals Division, but also have an increasing impact on the prices which we are able to charge for the generic drugs marketed by our Sandoz Division. This is particularly true in Germany, our second largest market for generic products, where various measures were introduced to require generic manufacturers to lower their prices. Similar effects are also being felt on Sandoz's business in other markets, particularly in Europe. We expect that these and other challenges will continue to put pressure on our revenues, and therefore could have an adverse effect on our business, financial condition or results of operations.

For more information on the pricing controls and on our challenging business environment see "Item 4.B Business Overview Pharmaceuticals Price Controls" and "Item 5.A Operating Results Factors affecting results of operations Challenging Business Environment and Ongoing Pricing Pressures".

Our Pharmaceuticals Division faces intense competition from lower-cost generic products.

Our Pharmaceuticals Division faces increasing competition from lower-cost generic products. Our Pharmaceuticals Division's products are generally protected by patent rights which are expected to provide us with exclusive marketing rights in various countries. However, those patent rights are of varying strengths and durations. Loss of market exclusivity and the introduction of a generic version of the same or a similar medicine typically results in a significant and sharp reduction in net sales for the relevant product, given that generic manufacturers typically offer their versions of the same medicine at sharply lower prices.

In 2007, there is a significant risk that generic competition will emerge for our Top 20 product *Trileptal* and that US generic competition will emerge for our Top 20 product *Lamisil,* which already faces generic competition outside the US. *Lamisil*'s US patent will expire in June 2007. In 2006, *Lamisil* accounted for $574 million in annual sales in the US, or 1.6% of our net sales from continuing operations (3.9% of the sales in the US). Similarly, patent protection for *Trileptal*'s active ingredient has expired in the US and other major countries. In 2006, *Trileptal* accounted for $549 million in sales in the US, or 1.5% of our net sales from continuing operations (3.8% of our sales in the US).

In addition to *Lamisil*, three other products that are still among our Top 20 products have already encountered generic competition in some markets: *Neoral, Sandostatin SC* and *Voltaren*. As a result, revenue from these products has declined, and may decline significantly further in the future. A number of our other top-selling products, including the anti-hypertension drugs *Diovan* and *Lotrel* as well as the

oncology drugs *Gleevec/Glivec* and *Zometa,* could also potentially face generic competition in the coming five to ten years in various markets, particularly the US and Europe.

Competition in the healthcare industry is generally becoming more intense.

Competition in the healthcare industry generally continues to intensify. The time between the launch of innovative "first-in-class" treatments and "me-too" or generic versions has shortened significantly in recent years, which is putting increasing pressure on our Pharmaceuticals Division to maximize revenue from a new product quickly following its launch, in order to be able to recover its significant research and development costs. As a result of increasing competition from generic companies, certain research-based pharmaceutical companies have started to sell their products directly to the generic market upon expiration of their patents by forming strategic alliances with generic pharmaceutical companies. This allows them to undercut the revenues and profitability of generic manufacturers, including our Sandoz Division. At the same time, competition among generics manufacturers also continues to intensify as the entire healthcare industry adjusts to increased pressures by governments and other stakeholders to contain healthcare costs. Finally, the generic industry is rapidly consolidating and has witnessed the emergence of large, global market players that compete vigorously for market share. We expect all of these trends to continue, which could have a material adverse effect on our business, financial condition and results of operations.

Our Sandoz Division may face patent infringement lawsuits by research-based pharmaceutical companies.

From time to time, our Sandoz Division may seek approval to market a generic version of a product before the expiration of patents claimed by others for the relevant product. We do this in cases where we believe that the relevant patents are invalid, unenforceable, or would not be infringed by our generic product. As a result, we frequently face patent litigation and in certain circumstances, we may elect to market a generic product even though patent infringement actions are still pending. Should we elect to proceed in this manner and conduct a "launch-at-risk", we could face substantial damages if the final court decision is adverse to us. This could have a material adverse effect on our business, financial condition or results of operations.

Our research and development efforts may not succeed.

Our ability to continue to grow our business and to replace any lost sales due to the loss of exclusivity for our products due to patent expiration depends upon the ability of our research and development activities to identify and develop high-potential breakthrough products and to bring them to market. To accomplish this, we commit substantial effort, funds and other resources to research and development, both through our own dedicated resources, and through various collaborations with third parties. Developing new pharmaceutical products and bringing them to market, however, is a costly, lengthy and uncertain process and there can be no guarantee that our research and development activities will produce a sufficient number of commercially viable new products, in spite of these significant investments.

In the pharmaceuticals business, the research and development process can take up to 12 years, or even longer, from discovery to commercial product launch. New products do not only need to undergo intensive pre-clinical and clinical testing, but also pass a highly complex, lengthy and expensive approval process. During each stage of the process, there is a substantial risk that we will encounter serious obstacles or will not achieve our goals and accordingly we may abandon a product in which we have invested substantial amounts of time and money. There also appears to be a renewed focus on product safety by regulatory authorities following widely publicized product recalls such as Merck & Co.'s recall of its pain medicine Vioxx®. As a result, regulatory authorities may be more cautious in approving new products or even reassess the safety and efficacy of our existing products. If we are unable to maintain a continuous flow of successful new products and successful new indications or brand extensions for existing products sufficient to cover our substantial research and development costs and to replace sales that are lost as older products approach the end of their commercial life cycles or are displaced by competing

products or therapies, this could have a material adverse effect on our business, financial condition or results of operations.

In addition, we invest a significant amount of effort and financial resources into research and development collaborations with third parties which we do not control. Many of these third parties may be small companies which may not have the same organizational resources and development expertise as Novartis. Should these third parties fail to meet our expectations, we may lose our investment in these collaborations or fail to receive the expected benefits, which could have a material adverse effect on our business, financial condition or results of operations.

Litigation, in particular product liability and patent lawsuits and government investigations, may impact our operating results.

In recent years, the industries that make up our business have become important targets of litigation around the world, especially in the US. In particular, our business has been, and may continue to be subject to a variety of lawsuits and other legal proceedings that can arise from time to time in the ordinary course of business, including product liability and patent lawsuits, and government investigations. As a result, claims could be made against us which, in whole or in part, might not be covered by insurance. While we do not believe that any of the existing claims against us will have a material adverse effect on our financial position, litigation is inherently unpredictable and excessive verdicts do occur. In the ordinary course of business, we also frequently defend our patents against challenges by our competitors. Should we fail to successfully defend our patents, we will be faced with generic competition for the relevant products, and the resulting loss of revenue. Adverse judgments or settlements could therefore have a material adverse effect on our results of operations in any particular period. For more detail regarding specific legal matters currently pending against us, see "Item 18. Financial Statements note 19.2" and "Item 4. Information on the Company 4.B Business Overview Pharmaceuticals Intellectual Property" and " Consumer Health Intellectual Property" setting forth the status of various intellectual property matters.

Our business is significantly impacted by strict regulatory requirements.

We must comply with a broad range of regulatory requirements for the development, manufacture, marketing, labeling, distribution and pricing of our products, particularly in the US, the EU and Japan. These requirements do not only affect our development costs, but also the time required to reach the market and the uncertainty of successfully doing so. Stricter regulatory requirements also heighten the risk of withdrawal of existing products by regulators on the basis of post-approval concerns over product safety, which would reduce revenues and can result in product recalls and product liability lawsuits. In addition, we may voluntarily cease marketing a product or face declining sales based on concerns about efficacy or safety, whether or not scientifically justified, even in the absence of regulatory action. The development of the post-approval adverse event profile for a product or the relevant product class may have a material adverse effect on the marketing and sale of the relevant product. For more detail on the governmental regulations that affect our business see the sections headed "Regulation" included in the descriptions of our four operating divisions under "Item 4.B Business Overview".

The pharmaceuticals industry faces increased public pressure.

There is considerable public sentiment against the pharmaceuticals industry, and the industry is under the close scrutiny of the public, governments and the media. In addition, there is significant pressure on our industry from certain less developed nations to make our products available to their population at drastically lower costs. Any increase in such negative public sentiment or increase in public scrutiny or pressure from such less developed 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 adversely affect our business, financial condition or results of operations.

The manufacture of our products is technically highly complex and we may face supply disruptions.

The products we market, distribute and sell are either manufactured at our own dedicated manufacturing facilities or through toll manufacturing or other supply arrangements with third parties. In either case, we need to ensure that the manufacturing process complies with applicable regulations and manufacturing practices as well as our own high quality standards. Many of our products, however, are the result of technically complex manufacturing processes or require a supply of highly specialized raw materials. For some of our products and certain key raw materials, we may also rely on a single source of supply. As a result of these factors, the production of one or more of our products may be disrupted from time to time. Both our Vaccines and Diagnostics Division and our Ciba Vision Business Unit, for example, have experienced significant production shutdowns in the recent past. We may also not be able to rapidly alter production volumes to respond to changes in demand for particular products. A disruption in the supply of certain key products or our failure to accurately predict the demand for those products could have a significant adverse effect on our business, financial condition or results of operations. In addition, because our products are intended to promote the health of patients, any supply disruption could lead to allegations that the public health has been endangered and could subject us to lawsuits.

An increasing amount of intangible assets and goodwill on our books may lead to significant impairment charges in the future.

We regularly review our long-lived assets, including identifiable intangible assets and goodwill, for impairment. Goodwill, in-process research and development and acquired development projects not yet ready for use are subject to impairment review at least annually. Other long-lived assets are reviewed for impairment when there is an indication that an impairment may have occurred. The amount of goodwill and other intangible assets on our consolidated balance sheet has increased significantly in recent years, primarily as a result of our recent acquisitions. Although we do not currently have an indication of any significant additional impairments, impairment testing under IFRS 3 may lead to further impairment charges in the future. Any significant impairment charges would have a significant adverse effect on our results of operations. For a detailed discussion of how we determine whether an impairment has occurred, what factors could result in an impairment and on the increasing impact of impairment charges on our results of operations see "Item 5.A Operating Results Critical Accounting Policies and Estimates Impairment of Long-Lived Assets".

Our distribution network is consolidating.

Increasingly, significant portions of our sales, particularly in the US, are made to a relatively small number of US drug wholesalers, retail chains, and other purchasing organizations. For example, our three most important customers, all from the US, accounted for approximately 10%, 9% and 7%, respectively, of Group net sales in 2006 and there has been a trend toward further consolidation among our distributors, especially in the US. As a result, our distributors are gaining additional purchasing leverage over us, which increases the pricing pressures facing our businesses. Moreover, we are exposed to a concentration of credit risk as a result of this concentration among our customers. Should one or more of our major customers experience financial difficulties, the effect on us would be substantially greater than would have been the case in the past. The increased purchasing power of these customers also increases the risk that we may not be able to effectively enforce the high standards which we expect of our distributors and customers. Each of these factors could have a material adverse effect on our business, financial condition and results of operations.

An inability to attract and retain qualified personnel could adversely affect our business.

We highly depend upon skilled personnel in key parts of our organization and we invest heavily in recruiting and training qualified individuals. The loss of the service of key members of our organization particularly senior members of our scientific and management teams may delay or prevent the achievement of major business objectives. In addition, the success of our research and development

activities is particularly dependent on our ability to attract and retain sufficient numbers of high quality researchers and development specialists. We do, however, face intense competition for qualified individuals from numerous pharmaceutical and biotechnology companies, universities, governmental entities and other research institutions. We may therefore be unable to attract and retain qualified individuals in sufficient numbers, which would have an adverse effect on our business, financial condition or results of operations.

Environmental liabilities may impact our results of operations.

The environmental laws of various jurisdictions impose actual and potential obligations on us to remediate contaminated sites. We have also been identified as a potentially responsible party under the US Comprehensive Environmental Response Compensation and Liability Act in respect to certain sites. Failure to properly manage environmental risks could adversely affect our results of operations. For more detail regarding environmental matters, see "Item 4.D Property, Plants and Equipment Environmental Matters" and "Item 18. Financial Statements note 19.1."

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

A significant portion of our earnings and expenditures are in currencies other than US dollars, our reporting currency. In 2006, 45% of our net sales were made in US dollar, 26% in euro, 6% in Japanese yen, 2% in Swiss franc and 21% in other currencies. During the same period, 39% of our expenses arose in US dollar, 24% in euro, 16% in Swiss franc, 5% in Japanese yen and 16% 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 in US dollars and the components of shareholders' equity. For more information on the effects of currency fluctuations on our consolidated financial statements and on how we manage currency risk, see "Item 5.A Operating Results Effects of Currency Fluctuations" and "Item 11 Quantitative and Qualitative Disclosures about Non-Product Related Market Risk."

A regional or global influenza pandemic could severely affect our business.

The occurrence of an influenza pandemic could severely affect our business in a number of ways, including by disrupting the production and delivery of our products or other parts of our supply chain, by causing staffing shortages or by negatively affecting the demand for some of our products or the general level of economic activity in the affected areas. In addition, our Vaccines and Diagnostics Division is seeking to become a global supplier of a vaccine against a potential pandemic influenza virus. In the event of a pandemic, however, governments may be more willing to abrogate property rights for medicines that might otherwise be in short supply and there is a risk that governments in affected regions could seize supplies of such a vaccine or require us to supply the vaccine at a reduced price.

Earthquakes could adversely affect our business.

Our corporate headquarters, the headquarters of our Pharmaceuticals Division, and certain of our major Pharmaceuticals Division production facilities are located near earthquake fault lines in Basel, Switzerland. In addition, other major facilities of our Pharmaceuticals, Sandoz and Vaccines and Diagnostics Division are located near major earthquake fault lines in various locations around the world. In the event of a major earthquake, we could experience business interruptions, destruction of facilities and/or loss of life, all of which could materially adversely affect our business, financial condition or results of operations.

We may be held responsible for the potential misconduct by our third party agents, particularly in developing countries.

We have operations in approximately 140 countries around the world. In many of these countries, particularly in less developed markets, we rely heavily on third party distributors and other agents for the marketing and distribution of our products. Many of these third parties are small and do not have internal compliance resources that are comparable to those within our own organization. In many emerging growth markets, the local legal systems have also undergone dramatic changes in recent years. In many cases, specific regulations on the marketing and sale of pharmaceutical products either do not exist or the interpretation and safeguards of the new regulatory systems are still being developed, which may result in legal uncertainty and in existing laws and regulations being applied inconsistently. In addition, many of these countries are also plagued by widespread corruption. Should our efforts in screening our third party agents and in detecting cases of potential misconduct fail, we could be held responsible for the non-compliance by these third parties with applicable laws and regulations, which may have a negative effect on our reputation and our business.

Risks Related To Our ADSs

The price of our ADSs and the US dollar value of any dividends may be affected by fluctuations in the US dollar/Swiss franc exchange rate.

Our American Depositary Shares (ADSs) trade on the New York Stock Exchange (NYSE) in US dollars. Since the shares underlying the ADSs are listed in Switzerland on the SWX Swiss Exchange (SWX) and trade on the European trading platform Virt-X in Swiss francs, the value of the ADSs may be affected by fluctuations in the US dollar/Swiss franc exchange rate. In addition, since any dividends that we may declare will be denominated in Swiss francs, exchange rate fluctuations will affect the US dollar equivalent of dividends received by holders of ADSs. If the value of the Swiss franc decreases against the US dollar, the price at which our ADS trade and the value of the US dollar equivalent of any dividend will decrease accordingly. During 2006, on the other hand, the price of our ADSs increased by 9% mainly because of the weakening US dollar, while the price in Swiss francs of the underlying Novartis shares only increased by approximately 2%.

Holders of ADSs may not be able to exercise preemptive rights attached to shares underlying ADSs.

Under Swiss law, shareholders have preemptive rights to subscribe for cash for issuances of new shares on a pro rata basis. Shareholders may waive their preemptive rights in respect of any offering at a general meeting of shareholders. Preemptive rights, if not previously waived, are transferable during the subscription period relating to a particular offering of shares and may be quoted on the SWX. US holders of ADSs may not be able to exercise the preemptive rights attached to the shares underlying their ADSs unless a registration statement under the US Securities Act of 1933, as amended, is effective with respect to such rights and the related shares, or an exemption from the registration requirements thereunder is available. In deciding whether to file such a registration statement, we would evaluate the related costs and potential liabilities as well as the benefits of enabling the exercise by the holders of ADSs of the preemptive rights associated with the shares underlying their ADSs. We cannot guarantee that any registration statement would be filed, or, if filed, that it would be declared effective. If preemptive rights could not be exercised by an ADS holder, JPMorgan Chase Bank, N.A., as depositary, would, if possible, sell such holder's preemptive rights and distribute the net proceeds of the sale to the holder. If the depositary determines, in its discretion, that such rights could not be sold, the depositary might allow such rights to lapse. In either case, the interest of ADS holders in Novartis would be diluted and, if the depositary allows rights to lapse, holders of ADSs would not realize any value from the granting of preemptive rights.

Item 4. Information on the Company

4.A History and Development of Novartis

Novartis is dedicated to providing healthcare solutions that address the evolving needs of patients and societies worldwide. Our focus is on patients: We provide innovative products to treat and prevent diseases, expand access to critical medicines, ease suffering and improve quality of life. With more than 101,000 associates operating in 140 countries, Novartis is the only company with leadership positions in patented and generic pharmaceuticals, vaccines and OTC medicines. We are strengthening this portfolio, investing in these strategic growth platforms. In 2006, Novartis generated consolidated net sales of $37.0 billion and invested $5.4 billion in research and development.

Our name, derived from the Latin *novae artes,* means "new skills" and reflects our commitment to focus research and development to bring new healthcare products to patients and physicians worldwide. At the same time, we also seek to provide a return to shareholders that reflects our performance and to adequately reward those who invest ideas and resources in our company.

Created in 1996 through the merger of Ciba-Geigy and Sandoz, Novartis is divided operationally into four Divisions: Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health.

Pharmaceuticals Division

Our Pharmaceuticals Division researches, develops, manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular and metabolism; oncology and hematology; neuroscience; respiratory; infectious diseases, transplantation & immunology; ophthalmics, dermatology, gastrointestinal & urinary; and arthritis & bone. The Pharmaceuticals Division is organized into global business franchises responsible for the marketing of various products as well as a Business Unit called Novartis Oncology responsible for the global development and marketing of oncology products. The Oncology Business Unit is not required to be separately disclosed as a segment, since it shares common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments with the remainder of the Pharmaceuticals Division. The Pharmaceuticals Division is the most important division of Novartis, accounting in 2006 for $22.6 billion, or 61%, of Group net sales and for $6.7 billion, or 82%, of Group operating income.

Vaccines and Diagnostics Division

Our Vaccines and Diagnostics Division is a new division focused on the development of preventive vaccine treatments and diagnostic tools. It was formed in April 2006 following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis. The division has two activities: Novartis Vaccines and Chiron. Novartis Vaccines is the world's fifth-largest vaccines manufacturer of vaccines and the second-largest supplier of influenza vaccines in the US. Key products also include meningococcal, pediatric and travel vaccines. Chiron is a blood testing and molecular diagnostics activity dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world's blood supply. In 2006, the Vaccines and Diagnostics Division accounted for $956 million, or 3% of Group net sales, and produced a $26 million operating loss.

Sandoz Division

Our Sandoz Division is a leading global generic pharmaceuticals company that develops, produces and markets drugs along with pharmaceutical and biotechnological active substances. Through Sandoz, Novartis is the only major pharmaceutical company to have leadership positions in both patented prescription drugs as well as generic pharmaceuticals. The Sandoz Division maintains a Retail Generics activity and an Anti-Infectives activity. In Retail Generics, Sandoz develops and manufactures active ingredients and finished dosage forms that are no longer covered by patents. Retail Generics includes the development and manufacture of biopharmaceuticals. Retail Generics also supplies certain active

ingredients to third parties. In Anti-Infectives, Sandoz develops and manufactures off-patent active pharmaceutical ingredients and intermediates, mainly antibiotics, for internal use by Retail Generics and for sale to third-party customers. Sandoz offers some 840 compounds in over 5,000 forms in 110 countries. The most important product groups include antibiotics, treatments for central nervous system disorders, gastrointestinal medicines, cardiovascular treatments and hormone therapies. Sandoz is the Group's third largest division, both in terms of Group net sales and operating income. In 2006, the Sandoz Division accounted for $6.0 billion, or 16%, of Group net sales and for $736 million, or 9%, of Group operating income.

Consumer Health Division

Our Consumer Health Division consists of the following four Business Units: OTC (over-the-counter medicines), Animal Health, Gerber and CIBA Vision. Each has manufacturing, distribution and selling capabilities. However, none are material enough to the Group to be separately disclosed as a segment. The OTC Business Unit covers over-the-counter self medications. The Animal Health Business Unit covers veterinary products for farm and companion animals. The Gerber Business Unit covers foods as well as other products and services designed to serve the particular needs of babies and infants. The CIBA Vision Business Unit covers contact lenses, lens care products, and ophthalmic products. The Medical Nutrition Business Unit was previously included in the Consumer Health Division, but has been classified as a discontinuing operation as a consequence of announcements during 2006 to divest the activities of this Business Unit. The Medical Nutrition Business Unit covers health and medical nutrition products. In 2006, the Consumer Health Division (excluding discontinuing operations) was the Group's second largest division, both in terms of Group net sales and operating income and accounted for $6.5 billion, or 18%, of Group net sales and for $1.1 billion, or 13%, of Group operating income.

Novartis AG

Novartis AG was incorporated on February 29, 1996 under the laws of Switzerland as a stock corporation ("Aktiengesellschaft") with an indefinite duration. On December 20, 1996, our predecessor companies, Ciba-Geigy and Sandoz, merged into this new entity, creating Novartis. We are domiciled in and governed by the laws of Switzerland. Our registered office is located at the following address:

Novartis AG
Lichtstrasse 35
CH-4056 Basel
Switzerland
Telephone: 011-41-61-324-1111
Web: www.novartis.com

Our registered shares are listed in Switzerland on the SWX and traded on the European trading platform Virt-X. Our American Depositary Shares are listed on the NYSE. Our shares are also traded on the International Retail Service (IRS) at the London Stock Exchange. 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.

The Novartis Group is a multinational group of companies specializing in the research, development, manufacturing and marketing 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 significant operating subsidiaries, see "Item 18. Financial Statements note 32".

Major Corporate Developments 2004-2006

2006

February	Novartis completes the divestment announced in November 2005 of its Nutrition & Santé business to ABN AMRO Capital France. Gross cash proceeds generated from the sale of equity and repayment or assumption of debt on closing the transaction in February 2006 was $211 million.
April	Novartis completes the acquisition of all of the remaining shares of Chiron Corporation in addition to the 44% stake that it already owned. The amounts paid for the shares, related options of associates and transaction costs totaled approximately $5.7 billion. A new division called Vaccines and Diagnostics is created to incorporate activities in human vaccines and molecular diagnostics, while the pharmaceutical activities of Chiron are integrated into the Pharmaceuticals Division.
September	Novartis completes the acquisition of NeuTech Pharma plc, a UK biopharmaceuticals company for GBP 10.50 per share for the entire share capital of the company. Including the cost of options and transaction costs the final consideration for the deal was $606 million (GBP 328 million). The acquisition followed a public offer for NeuTec and allowed Novartis to strengthen its position in life-threatening hospital infections.
October	Novartis agrees to acquire the animal health business of Sankyo Lifetech Co., Ltd., expanding the presence of our Animal Health business in Japan. The transaction is expected to close at the end of March 2007.
November	Novartis announces plans for a new strategic biomedical R&D center in Shanghai. This site will become an integral part of the Group's global research and development network.
December	Novartis announces a definitive agreement to divest its Medical Nutrition Business Unit to Nestlé for $2.5 billion. This transaction is expected to be completed in the second half of 2007.

2005

January	The exclusive marketing rights to the antihypertension medicines *Cibacen* and *Cibadrex* in most European markets are granted to the Swedish specialty pharmaceuticals company Meda AB in exchange for a cash payment of $135 million.
February	Novartis announces the acquisition of two leading generic drug companies, privately-held Hexal AG of Germany and the US quoted company Eon Labs, Inc., and their integration into its Sandoz Division. The two companies are acquired for approximately $8 billion in all-cash transactions that bring together three premier generics companies. The acquisition of Hexal is completed in June, while the purchase of 100% of Eon Labs is completed in July.
March	A new CHF 4.0 billion share repurchase program, the fifth at Novartis since 1999, is approved by our shareholders at the Annual General Meeting (AGM). The program begins following completion of a prior program initiated in August 2004.
July	An agreement is signed for Novartis to acquire the rights to a portfolio of over-the-counter (OTC) products, led by the pain medicine Excedrin, from Bristol-Myers Squibb Company for approximately $660 million in cash, significantly strengthening the company's OTC business in the US market. The principal North American business is consolidated as of September 1.

2004

January	A CHF 3.0 billion share repurchase program is announced to start following completion of a program initiated in 2002. Shareholders at the AGM approved the program in February 2004, and it commenced in August 2004.
February	The global adult medical nutrition business of Mead Johnson & Company, a Bristol-Myers Squibb Company subsidiary, is acquired for approximately $385 million in cash.
June	Novartis announces plans to acquire two generics companies: the Danish company Durascan A/S from AstraZeneca plc and Sabex Holdings Ltd of Canada. Durascan expands our generics presence in the Nordic region, while Sabex, which was acquired for $565 million in cash, provides strong growth opportunities in injectable generics and new entry into the Canadian generics sector.
July	Novartis Institute for Tropical Diseases opens its new facility in Singapore with particular focus on biomedical research for dengue fever and drug-resistant tuberculosis (TB).
October	Novartis announces the reorganization of its Sandoz generics business. Effective January 1, 2005, Sandoz ceases to be a Business Unit of our Consumer Health Division, and becomes a separate Division.

4.B Business Overview

Novartis is a world leader in both patent-protected and generic pharmaceuticals as well as vaccines and targeted consumer health products. Our aim is to seek and maintain leadership positions in these businesses.

Our company is currently organized into four operating Divisions: Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health.

Key Figures

The following table provides a Divisional breakdown of our net sales from continuing operations for the years ended December 31, 2006, 2005 and 2004.

	Year ended December 31,		
	2006	**2005**	**2004**
	($ millions)	**($ millions)**	**($ millions)**
Net Sales			
Pharmaceuticals	**22,576**	**20,262**	**18,497**
Vaccines and Diagnostics	**956**		
Sandoz	**5,959**	**4,694**	**3,045**
Consumer Health	**6,540**	**6,049**	**5,584**
Net sales from continuing operations	**36,031**	**31,005**	**27,126**
Net sales from discontinuing operations	989	1,207	1,121
Group net sales	**37,020**	**32,212**	**28,247**

The following table provides a regional breakdown of certain data for the years ended December 31, 2006, 2005 and 2004.

	Americas			Europe			Asia/Africa/Australia		
	2006	2005	2004	2006	2005	2004	2006	2005	2004
	(in $ millions, except number of associates)								
Group net sales	17,929	15,011	13,285	13,591	12,000	10,289	5,500	5,201	4,673
Group operating income	2,784	1,916	1,355	5,188	4,518	4,301	202	471	496
Number of associates (at December 31)	35,988	32,175	30,186	47,905	43,559	38,229	16,842	15,190	12,977
Investment in property, plant and equipment	486	396	340	1,097	683	787	268	115	142
Depreciation of property, plant and equipment	336	264	229	634	508	510	58	49	41
Group assets	19,194	17,049	12,166	45,378	37,977	37,897	3,436	2,706	2,425

PHARMACEUTICALS

Overview

Our Pharmaceuticals Division is a world leader in offering innovation-driven, patent-protected medicines to patients and physicians worldwide. This division is made up of approximately 80 affiliated companies which employed 54,314 associates as of December 31, 2006, selling products in approximately 140 countries. In 2006, the division reported consolidated net sales from continuing operations of $22.6 billion, which represented 61% of total Group net sales.

The Pharmaceuticals Division develops and markets products in the following therapeutic areas:

Cardiovascular & Metabolism

Oncology & Hematology

Neuroscience

Respiratory

Infectious Diseases, Transplantation & Immunology (IDTI)

Ophthalmics, Dermatology, Gastrointestinal & Urinary (ODGU)

Arthritis & Bone

Our Pharmaceuticals Division's current product portfolio includes more than 45 key marketed products, many of which are their respective market leaders. In addition, the division's portfolio of development projects includes 138 potential new products and new indications or formulations for existing products in various stages of clinical development.

Prior to January 1, 2006, the therapeutic areas of the Pharmaceuticals Division were divided into two marketing segments, General Medicines and Specialty Medicines. In addition, as of January 1, 2006, responsibility for our Infectious Diseases franchise was transferred from General Medicines to Specialty Medicines, to be joined with the Transplantation and Immunology therapeutic area to form the new IDTI therapeutic area. In October 2006, we announced the phased introduction of further changes to the organizational structure of the Pharmaceuticals Division, including the formation of the new ODGU therapeutic area. The following tables and product descriptions reflect this new organization. However, we continue to provide certain historical information elsewhere in this 20-F, including certain sales data, organized by the prior therapeutic areas.

16

Selected Key Marketed Products

The following table describes selected key marketed pharmaceutical products, in alphabetical order, by therapeutic area. Not all products are registered or sold in all markets or for all of the indications or formulations described below.

Therapeutic Area	Compound	Generic name	Indication	Formulation
Cardiovascular & Metabolism	*Diovan*	valsartan	Hypertension Heart failure Post-myocardial infarction	Capsule Coated tablet
	Diovan HCT/Co-Diovan	valsartan and hydrochlorothiazide	Hypertension	Film-coated tablet
	Lescol/Lescol XL	fluvastatin sodium	Primary hypercholesterolemia and mixed dyslipidemia Secondary prevention of adverse cardiac events after coronary transcatheter therapy slowing the progression of atherosclerosis	Capsule Tablet
	Lotensin/ Cibacen	benazepril hydrochloride	Hypertension	Coated tablet
	Lotensin HCT/ Cibadrex	benazepril hydrochloride and hydrochlorothiazide	Hypertension Adjunct therapy in heart failure Progressive chronic renal insufficiency	Coated tablet
	Lotrel	amlodipine besylate and benazepril hydrochloride	Hypertension	Capsule
	Starlix	nateglinide	Type 2 diabetes	Coated tablet

Oncology & Hematology	*Exjade*	deferasirox	Chronic iron overload due to blood transfusion	Dispersible tablet
	Femara	letrozole tablets/ letrozole	Advanced breast cancer in post-menopausal women Early breast cancer in post-menopausal women following standard tamoxifen therapy (extended adjuvant therapy) Early breast cancer in post-menopausal women directly after surgery (upfront adjuvant therapy)	Coated tablet
	Gleevec/ Glivec	imatinib mesylate/ imatinib	Certain forms of chronic myeloid leukemia Certain forms of gastrointestinal stromal tumor Certain forms of acute lymphoblastic leukemia Dermatofibrosarcoma protuberans Hypereosinophilic syndrome Aggressive systemic mastocytosis Myelodysplastic/myeloproliferative diseases	Tablet
	Proleukin	aldesleukin	Metastatic renal cell carcinoma (metastatic kidney cancer) Metastatic melanoma (a type of skin cancer)	Lyophilized cake for reconstitution
	Sandostatin LAR/ Sandostatin SC	octreotide acetate for injectable suspension/ octreotide acetate	Acromegaly symptoms associated with certain gastroenteropancreatic neuroendocrine tumors (carcinoid and VIPomas)	Vial Ampoule/ pre-filled syringe
	Zometa	zoledronic acid for injection/zoledronic acid	Hypercalcemia of malignancy Prevention of skeletal-related events in patients with bone metastases from solid tumors	Liquid concentrate Vial

Neuroscience	*Clozaril/ Leponex*	clozapine	Treatment-resistant schizophrenia Prevention and treatment of recurrent suicidal behavior in patients with schizophrenia and schizoaffective disorder	Tablet
	Comtan	entacapone	Parkinson's disease	Coated tablet
	Exelon	rivastigmine tartrate	Alzheimer's disease Dementia associated with Parkinson's disease	Capsule Oral solution
	Focalin/Focalin XR	dexmethylphenidate HCl/ dexmethylphenidate modified release	Attention deficit hyperactivity disorder	Tablet Capsule
	Ritalin/Ritalin LA	methylphenidate HCl/methylphenidate HCl modified release	Attention deficit hyperactivity disorder and narcolepsy/Attention deficit hyperactivity disorder	Tablet Capsule
	Stalevo	carbidopa/levodopa/ entacapone	Parkinson's disease	Coated tablet
	Tegretol	carbamazepine	Epilepsy Pain associated with trigeminal neuralgia Acute mania and bipolar affective disorders	Tablet Chewable tablet Suspension Suppository
	Trileptal	oxcarbazepine	Epilepsy	Tablet Oral suspension
Respiratory	*Foradil*	formoterol	Asthma Chronic obstructive pulmonary disease	Aerolizer (capsules) Aerosol (CFC) Aerosol (HFA) Certihaler (MDDPI)
	TOBI	tobramycin	Pseudomonas aeruginosa infection in cystic fibrosis	Inhalation solution
	Xolair	omalizumab	Allergic asthma	Lyophilised powder for reconstitution as subcutaneous injection

Infectious Diseases, Transplantation & Immunology (IDTI)	*Certican*	everolimus	Prevention of organ rejection (heart and kidney)	Tablet and dispersible tablet for oral suspension
	Coartem/ Riamet	artemether and lumefantrine	Plasmodium falciparum malaria or mixed infections that include Plasmodium falciparum Standby emergency malaria treatment	Tablet
	Cubicin	daptomycin	Complicated skin and soft tissue infections	Powder for intravenous infusion
	Famvir	famciclovir	Acute herpes zoster Recurrent genital herpes in immunocompetent patients Recurrent herpes labialis in immunocompetent patients Suppression of recurrent genital herpes in immunocompetent patients Recurrent mucocutaneous herpes simplex infections in HIV-infected patients	Tablet
	myfortic	mycophenolic acid/ mycophenolate sodium, USP	Prevention of graft rejection following kidney transplantation	Enteric coated tablet
	Neoral	cyclosporine, USP modified	Prevention of rejection following organ and bone marrow transplantation Non-transplantation autoimmune conditions such as severe psoriasis, nephrotic syndrome, severe rheumatoid arthritis, atopic dermatitis or endogenous uveitis	Capsule Oral solution
	Simulect	basiliximab	Prevention of acute organ rejection in de novo renal transplantation	Vial
	Tyzeka/Sebivo	telbivudine	Chronic hepatitis B	Tablet

Ophthalmics, Dermatology, Gastrointestinal & Urinary (ODGU)	*Elidel*	pimecrolimus cream	Atopic dermatitis (eczema)	Cream
	Enablex/Emselex	darifenacin terbinafine	Overactive bladder	Tablet
	Lamisil		Fungal infections of the skin and nails	Tablet Cream DermGel Solution Spray
	Lucentis	ranibizumab	Wet age-related macular degeneration	Intravitreal injection
	Visudyne	verteporfin	Wet age-related macular degeneration	Vial, intravenous injection activated by laser light
	Zaditor/Zaditen	ketotifen	Allergic conjunctivitis	Eye drops
	Zelnorm/Zelmac	tegaserod	Irritable bowel syndrome with constipation Chronic idiopathic constipation	Tablet

Arthritis & Bone	*Aclasta/Reclast*	zoledronic acid	Paget's disease of the bone	Solution for infusion
	Combipatch/ Estalis	estradiol hemihydrate and norethisterone acetate	Treatment of symptoms of estrogen deficiency in post-menopausal women Prevention of osteoporosis in post-menopausal women	Transdermal patch
	Estraderm TTS/ Estraderm MX	estradiol hemihydrate	Treatment of signs and symptoms of estrogen deficiency Prevention of accelerated post-menopausal bone loss	Transdermal patch
	Estragest TTS	estradiol hemihydrate and norethisterone acetate	Treatment of symptoms of estrogen deficiency in post-menopausal women Prevention of post-menopausal osteoporosis	Transdermal patch
	Miacalcin/ Miacalcic	salmon calcitonin	Osteoporosis Bone pain associated with osteolysis and/or osteopenia Paget's disease Neurosdystrophic disorders (synonymous with algodystrophy or Sudeck's disease) Hypercalcemia	Nasal spray Ampoule Vial Injection or infusion
	Prexige	lumiracoxib	Osteoarthritis Acute pain Primary dysmenorrhea	Tablet
	Vivelle Dot/ Estradot	estradiol hemihydrate	Estrogen replacement therapy Prevention of post-menopausal osteoporosis	Transdermal patch
	Voltaren	diclofenac	Inflammatory forms of rheumatism Pain management	Coated tablet Drop Ampoule Suppository Gel

Compounds in Development

The following table describes some of our compounds and new indications for our existing products presently under development.

Therapeutic area	Project/ Compound	Generic name	Potential Indication/Disease Area	Mechanism of action	Formulation	Planned filing dates/Current phase
Cardiovascular & Metabolism	*Exforge*	amlodipine besylate and valsartan	Hypertension	Dihydropyridine calcium antagonist and angiotensin-II receptor antagonist	Oral	US (tentative approval) EU (approved)
	Galvus	vildagliptin	Type 2 diabetes	Dipeptidyl-peptidase 4 (DPP-4) inhibitor	Oral	US, EU (submitted)
	Tekturna/Rasilez	aliskiren	Hypertension	Direct renin inhibitor	Oral	US, EU (submitted)
	Galvus (fixed-dose combinations)	various	Type 2 diabetes	Various	Oral	Various
	Tekturna/Rasilez (fixed-dose combinations)	various	Hypertension	Various	Oral	Various
	Lotrel	amlodipine besylate and benazepril hydrochloride	High-risk hypertension (ACCOMPLISH)	ACE inhibitor and calcium channel blocker	Oral	2009/III
	Diovan and Starlix(free combination)	valsartan and nateglinide	Prevention of new onset type 2 diabetes, cardiovascular morbidity and mortality (NAVIGATOR)	ARB and insulin secretagogue	Oral	≥2010/III
	LBM642	TBD	Dyslipidemia Diabetes	PPAR alpha and gamma dual agonist	TBD	≥2010/II
	APP018	TBD	Atherosclerosis	ApoA1 mimetic	TBD	≥2010/I
	LCI699	TBD	Hypertension	Aldosterone synthase inhibitor	TBD	TBD/I
	VNP489	TBD	Hypertension	ARB/NEP inhibitor FDC	Oral	≥2010/I

Oncology & Hematology	*Tasigna* (formerly AMN107)	nilotinib	Certain forms of chronic myeloid leukemia Gastrointestinal stromal tumor	Signal transduction inhibitor	Oral	US, EU (submitted) TBD/I
	Zometa	zoledronic acid	Aromatase inhibitor associated bone loss	Bisphosphonate	Intravenous	EU (submitted)
	PTK787	vatalanib	Colorectal cancer	Angiogenesis inhibitor	Oral	2007/III
			Other solid tumors			TBD/I
	Gleevec/Glivec	imatinib mesylate/ imatinib	Glioblastoma multiforme	PDGF-R inhibition	Oral	2008/III
			Idiopathic pulmonary fibrosis			TBD/II
			Pulmonary arterial fibrosis			TBD/II
			Solid tumors			TBD/I
	RAD001	everolimus	Renal cell carcinoma Refractory carcinoid tumors	mTOR pathway inhibitor	Oral	2009/III
			pICT			2008/II
			Other solid tumors			≥2010/II
	EPO906	patupilone	Solid tumors	Microtubule depolymerization inhibitor	Intravenous	2009/III
	SOM230	pasireotide	Cushing's Disease	Somatostatin (sst) 1/2/3/5 binder and hormone inhibitor	Intramuscular injection Subcutaneous injection	2009/III
			Acromegaly			≥2010/II
			Refractory carcinoid tumors			≥2009/II
			Gastroenteropancreatic neuroendocrine tumors			TBD/II
	Xyotax	paclitaxel poliglumex	Non-small cell lung cancer		Intravenous	TBD/III
	LBH589	TBD	Cutaneous T-cell lymphoma	Deacetylase inhibitor	Oral	2008/II
			Hematologic and solid tumors			TBD/I
	LBQ707	gimatecan	Solid tumors	Topoisomerase-I inhibitor	Oral	≥2010/II
	PKC412	midostaurin	Certain forms of acute myeloid leukemia	Multi-targeted kinase inhibitor	Oral	≥2010/II

	Exjade	deferasirox	Hereditary hemochromatosis	Iron chelator	Oral	TBD/I/II
	Proleukin	aldesleukin	Non-Hodgkin's lymphoma	Activation of cellular immunity	Subcutaneous	TBD/II
	AEE788	TBD	Solid tumors	Tyrosine kinase inhibitor	Oral	≥2010/I
	HCD122	TBD	Liquid tumors	Anti-CD40 monoclonal antibody	Injectable biologic	≥2010/I
	RAF265	TBD	Melanoma	B-Raf kinase inhibitor	Oral	≥2010/I
	TKI258	TBD	Solid and liquid tumors	Tyrosine kinase inhibitor	Oral	≥2010/I
	LBY135	TBD	Solid tumors	Monoclonal antibody	Intravenous	TBD/I
	BEZ235	TBD	Solid tumors	P13K inhibitor	Oral	TBD/I
Neuroscience	*Comtan*	entacapone	Parkinson's disease	Catechol-O-methyltransferase inhibitor	Oral	Japan (submitted)
	Exelon Patch	rivastigmine base	Alzheimer's disease Dementia associated with Parkinson's disease	Cholinesterase inhibitor	Transdermal patch	US, EU (submitted)
	AGO178	agomelatine	Major depressive disorder	Melatonin receptor (M1 and M2) agonist, 5HT2C antagonist	Oral	2008/III
	LIC477	licarbazepine	Bipolar disorder	Voltage sensitive sodium channel blocker	Oral	2008/III
	FTY720	fingolimod	Relapsing multiple sclerosis	Sphingosine-1-phosphate receptor modulator	Oral	2009/III
	ATI355	TBD	Spinal cord injury	Anti-NOGO A monoclonal antibody	Intrathecal infusion	≥2010/II
	AFQ056	TBD	Anxiety	mGlu5 receptor antagonist	Oral	TBD/I
	BAF312	TBD	Multiple sclerosis	Sphingosine-1-phosphate receptor modulator	Oral	TBD/I
	BGG492	TBD	Epilepsy	AMPA antagonist	Oral	TBD/I
	CAD106	TBD	Alzheimer's disease	Beta-amyloid vaccine	Injection	TBD/I

Respiratory	QAB149	indacaterol	Chronic obstructive pulmonary disease	Once-daily long-acting beta-2 agonist	Inhalation	2008/III
	MFF258	formoterol and mometasone furoate	Asthma Chronic obstructive pulmonary disease	Long-acting beta-2 agonist and inhaled corticosteroid	Inhalation	2008/III
	TMB100	tobramycin	Cystic fibrosis	Aminoglycoside antibiotic	Dry powder for inhalation	2008/III
	Xolair	omalizumab	Asthma in patients aged 6-11 years	Anti-IgE monoclonal antibody	Lycophilized powder for reconstitution for subcutaneous injection	TBD/III
			Liquid formulation in pre-filled syringe			2009/II
			Peanut allergy		Lycophilized powder for reconstitution for subcutaneous injection	TBD/I
	ACZ885	TBD	Chronic obstructive pulmonary disease	Monoclonal antibody to IL-1 beta	Injection	TBD/II
	NVA237	glycopyrronium bromide	Chronic obstructive pulmonary disease	Long-acting anti-muscarinic	Inhalation	≥2010/II
	QVA149	indacaterol and glycopyrronium bromide	Chronic obstructive pulmonary disease	Long-acting beta-2 agonist and long-acting anti-muscarinic	Inhalation	≥2010/II
	QAE397	TBD	Asthma	Glucocorticosteroid	Inhalation	TBD/II
	QAT370	TBD	Chronic obstructive pulmonary disease	Long-acting anti-muscarinic	Inhalation	TBD/II

Infectious Diseases, Transplantation & Immunology (IDTI)	*Certican*	everolimus	Prevention of organ rejection (heart and kidney)	Growth-factor-induced cell proliferation inhibitor	Oral	US, Japan (submitted)
	Tyzeka/Sebivo	telbivudine	Chronic hepatitis B	Viral polymerase inhibitor	Oral	US (approved) EU (submitted)
	Cubicin	daptomycin	Staphylococcus aureus bacteremia and Infective Endocarditis	Cyclic lipopeptide	Powder IV for infusion	EU (submitted)
	Mycograb	efungumab	Invasive Candida	Antibody fragment vs. fungal Hsp90	Intravenous infusion	EU (submitted) US (2009/III)
	TFP561	tifacogin	Severe community acquired pneumonia	Recombinant tissue factor pathway inhibitor	Intravenous infusion	2008/III
	ABF656 (Albuferon)	albumin interferon alfa 2-b	Chronic hepatitis C	Longer-acting alpha interferon	Subcutaneous injection Lyophilized powder	2009/III
	Aurograb	TBD	Serious staphylococcal infections	Antibody fragment	Intravenous infusion	2010/II
	LDC300	valtorcitabine	Hepatitis B	Viral polymerase inhibitor	Oral	≥2010/II
	NM283	valopicitabine	Hepatitis C	Viral polymerase inhibitor	Oral	≥2010/II
	ANA975	TBD	Hepatitis C	Toll-like receptor 7 agonist	Oral	≥2010/II
	AEB071	TBD	Prevention of organ rejection (kidney)	Protein kinase C inhibitor	Oral	≥2010/II
	NIM811	TBD	Hepatitis C	Cyclophilin inhibitor	Oral	TBD/II
	RSV604	TBD	Respiratory syncytial virus	Inhibition of viral replication	Oral Intravenous infusion	≥2010/I
	SBR759	TBD	Hyperphosphatemia	Selective binding of phosphate (Fe(III) containing polymer)	Oral	≥2010/I

Ophthalmics, Dermatology, Gastrointestinal & Urinary	*Lamisil*	terbinafine	Fungal infection of the scalp in children (tinea capitis)	Fungal squalene epoxidase inhibitor	Oral	US (approved)
			Fungal infection of the nail		Nail lacquer	>2008/III
	Zelnorm/Zelmac	tegaserod	Irritable bowel syndrome with constipation	5HT4-receptor agonist	Oral	US (approved) EU (2007/III)
			Functional dyspepsia			US (2007/III)
			Opioid-induced gastrointestinal dysfunction			TBD/II
	OPC759	rebamipide	Dry eye	Mucin secretagogue	Eye drops	TBD/III
	Elidel	pimecrolimus	Atopic dermatitis in infants	T-cell and mast cell inhibitor	Cream	TBD/III
			Dry eye		Eye drops	≥2010/II
	Lucentis	ranibizumab	Diabetic Macular Edema	VEGF blocker	Intra-vitreal	TBD/II
	PTK787	vatalanib	Age-related macular degeneration	Angiogenesis inhibitor	Oral	TBD/II
	AEB071	TBD	Psoriasis	PKC inhibitor	TBD	TBD/I
	AHT956	TBD	Psoriasis	PKC inhibitor	TBD	TBD/I
	RKI983	TBD	Glaucoma	Rho kinase inhibitor	Eye drops	TBD/I

Arthritis & Bone	*Aclasta/Reclast*	zoledronic acid	Paget's disease of the bone	Bisphosphonate, osteoclast inhibitor	Intravenous	US (submitted) EU (approved)
			Postmenopausal osteoporosis treatment			US, EU (submitted)
			Fracture prevention			TBD/III
			Male osteoporosis			TBD/III
			Corticoid-induced osteoporosis			TBD/III
			Postmenopausal osteoporosis prevention			TBD/III
	Prexige	lumiracoxib	Osteoarthritis Acute pain Primary dysmenorrhea	Cyclo-oxygenase-2 inhibitor	Oral	EU (approved) US (2007/III)
	ACZ885	TBD	Muckle Wells Syndrome	Monoclonal antibody to IL-1 beta	Injection	2009/II
			Rheumatoid arthritis			TBD/II
			Juvenile rheumatoid arthritis			TBD/I
	SMC021	salmon calcitonin	Osteoporosis	Inhibition of osteoclast activity	Oral	>2010/II
			Osteoarthritis	Regulator of calcium homeostasis		>2010/II
	AIN457	TBD	Rheumatoid arthritis	Monoclonal antibody to IL-17A	Intravenous	TBD/I

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

Phase II: Clinical studies that test the safety and efficacy of the compound in patients with the targeted disease, with the goal of determining the appropriate doses for further testing and evaluating study design as well as identifying common side effects and risks.

Phase III: Large-scale clinical studies with several hundred or several thousand patients to establish safety and effectiveness for regulatory approval for indicated uses and to evaluate the overall benefit-risk relationship.

The tables shown above and the summary that follows describe key marketed products and key compounds and potential new indications in development in our Pharmaceuticals Division. Unless otherwise indicated, and subject to required regulatory approvals and, in certain instances, contractual limitations, we intend to sell our marketed products throughout the world. These compounds and indications are in various stages of development throughout the world. For some compounds, the development process is ahead in the US; for others, development in one or more other countries or regions is ahead of that in the US. Due to the uncertainties associated with the development process, and due to regulatory restrictions in some countries, it may not be possible to obtain regulatory approval for any or all of the new compounds and new indications referred to in this Form 20-F. In addition, for some of our products, we are required to conduct post-approval studies (Phase IV) to evaluate long-term effects or to gather information on the use of the product under special conditions. See " Regulation" for further information on the approval process.

Cardiovascular & Metabolism

Novartis is a world leader in offering products to treat cardiovascular and metabolic diseases, particularly high blood pressure (hypertension), elevated cholesterol (hyperlipidemia), heart failure and patients following a heart attack. We believe that our broad portfolio of cardiovascular and metabolic agents offers some of the best tools available to treat and protect patients along critical points of the cardiometabolic continuum from novel treatments for type 2 diabetes and medicines to manage hypertension, congestive heart failure, and high cholesterol, to life-saving therapies following heart attack.

Our pipeline includes compounds with the potential to change the way cardiovascular and metabolic diseases are treated, in particular the oral DPP-4 inhibitor *Galvus* (vildagliptin, formerly LAF237) for type 2 diabetes and the oral renin inhibitor *Tekturna/Rasilez* (aliskiren, formerly SPP100) for hypertension.

Key Marketed Products

Diovan (valsartan) and *Diovan HCT/Co-Diovan* (valsartan and hydrochlorothiazide) are leaders in the angiotensin-II receptor blocker (ARB) class of anti-hypertensive (high-blood pressure) agents. This class has been a key growth driver in the global anti-hypertensive market segment, with *Diovan* consistently ranking as the most prescribed brand in the ARB class, according to IMS Health. *Diovan* specifically inhibits angiotensin-II from binding to its receptor and causing arteries to constrict, an action that can cause high blood pressure. The fixed combination product *Diovan HCT*, which includes the diuretic hydrochlorothiazide, provides additional efficacy for patients who require a greater reduction in blood pressure than can be achieved with either agent alone. *Diovan* is the only agent in its class worldwide indicated to treat high blood pressure, high-risk heart attack survivors (VALIANT trial), and patients with heart failure (Val-HeFT trial). In the US, *Diovan* is approved for the treatment of hypertension, heart failure and in patients following a heart attack. First launched in 1996, *Diovan* is available in more than 80 countries for the treatment of heart failure, in more than 70 countries for the treatment of patients following a heart attack, and in over 100 for the treatment of hypertension.

Lescol/Lescol XL (fluvastatin sodium) is a statin (lipid-lowering agent) approved as an adjunct to diet for reducing elevated total cholesterol levels (hyperlipidemia), as well as to treat abnormal cholesterol levels (dyslipidemia) and to slow progression of hardening of the arteries (atherosclerosis) in patients with coronary heart disease. It is also indicated for secondary prevention of major adverse cardiac events (cardiac death, non-fatal myocardial infarction and coronary revascularization) in patients with coronary heart disease after coronary transcatheter therapy. *Lescol XL* is an extended-release formulation launched in 2000 to allow for once-daily dosing. *Lescol* was first launched in the UK in 1993.

Lotensin/Cibacen (benazepril) is an ACE inhibitor used to treat high blood pressure that was first launched in 1989 as *Cibacen* in some areas of the world and then in 1991 in the US as *Lotensin*. In addition, in certain countries this medicine is approved for use as an adjunct therapy in heart failure and for the treatment of chronic renal insufficiency, a kidney disorder. A fixed-combination product called *Lotensin HCT/Cibadrex* has been developed as a high blood pressure therapy that combines benazepril hydrochloride with hydrochlorothiazide, a widely-used diuretic. In January 2005, the Swedish specialty medicines company Meda acquired the rights to *Cibacen* and *Cibadrex* in most European markets for a cash payment of $135 million.

Lotrel (benazepril and amlodipine) is a fixed combination anti-hypertensive treatment consisting of the ACE inhibitor benazepril, used in *Lotensin/Cibacen*, and the leading calcium channel blocker amlodipine. Launched in 1996 and only available in the US, *Lotrel* has been ranked by IMS Health as the leading prescribed branded combination anti-hypertensive therapy in the US since 2002. The product dose range expanded with the approval of two new high strengths in June 2006 *Lotrel* 5/40 (5 mg amlodipine / 40 mg benazepril) and *Lotrel* 10/40 (10 mg amlodipine / 40 mg benazepril).

Starlix (nateglinide) is an oral blood glucose lowering agent for use in patients with type 2 diabetes. The drug helps to control blood glucose levels at mealtimes through a rapid onset of action for a short duration. Launched in both the US and EU in 2001, it is approved in the EU for use in combination therapy with metformin, another type of oral anti-diabetic agent. In the US, *Starlix* is approved as a monotherapy in patients initiating drug treatment and in combination with the oral anti-diabetic agents metformin or thiazolidinediones.

New Indications in Development

Diovan (valsartan) is in further development for prevention of new-onset type 2 diabetes and cardiovascular disease in patients with impaired glucose tolerance (IGT). In the NAVIGATOR study (Nateglinide and Valsartan in Impaired Glucose Tolerance and Outcomes Research), *Diovan* is being investigated in a factorial design including the oral insulin sensitizer *Starlix* (nateglinide). It is expected that the trial will demonstrate whether *Diovan* or *Starlix* can prevent people with IGT from progressing to clinical diabetes, and in particular, whether treatment can reduce the incidence of cardiovascular disease in these patients. Results are now expected in 2010.

Starlix (nateglinide) is currently being investigated in combination with *Diovan* as part of the NAVIGATOR trial.

Compounds in Development

Exforge (amlodipine besylate and valsartan fixed combination) was approved in the EU in January 2007, and tentatively approved by the FDA in December 2006, following a successful clinical program involving more than 5,000 patients. We plan to launch *Exforge* shortly in Germany followed by launches in most other European Union countries throughout the year, pending expiration of the patent protection for amlodipine. *Exforge* is expected to be available to patients in the US in late September 2007 after the amlodipine besylate market exclusivity expires. Clinical trial results confirmed the efficacy and safety of *Exforge* as a once-daily oral treatment with double-digit reductions in blood pressure. *Exforge* is appropriate for patients whose blood pressure is not adequately controlled on any dihydropyridine calcium channel blocker or angiotensin receptor blocker. It is also appropriate for patients who experience dose-limiting side effects on either components, such as amlodipine-induced edema (swelling due to excess fluid, a common side effect of amlodipine). *Exforge's* approval marks the first fixed-dose combination of the two best-selling anti-hypertensives in their classes.

Galvus (vildagliptin, formerly LAF237) is an oral dipeptidyl peptidase 4 (DPP-4) inhibitor which we submitted for regulatory approval in the US and EU in 2006 for the treatment of type 2 diabetes. Unlike other therapies, the mechanism of action of *Galvus* addresses pancreatic islet dysfunction, a key underlying cause of type 2 diabetes, by inhibiting the degradation of two hormones (glucagon like peptide-1 and gastric inhibitory peptide). New data have confirmed that *Galvus* reduces HbA1c levels (a longer-term measure of average blood sugar levels) in a dose-proportional, clinically meaningful manner, both as a monotherapy and in combination with other anti-diabetic agents. *Galvus* has demonstrated an additive effect in reducing HbA1c levels in combination trials with metformin and with a sulfonylurea. *Galvus*, which has shown good tolerability without causing weight gain or edema, has been able to sustain meaningful HbA1c reductions out to two years of treatment. Due to its effects on pancreatic islet dysfunction, *Galvus* could become a significant new treatment for type 2 diabetes. Various *Galvus* fixed-dose combinations are being investigated. The first of these, a combination of *Galvus* with metformin, was submitted to FDA and the EU at the end of 2006.

Tekturna/Rasilez (aliskiren, formerly SPP100) is seeking to become the first in a new class of hypertensive agents called direct renin inhibitors. Phase III data has confirmed the efficacy and safety of *Tekturna/Rasilez* as a once-daily oral treatment with double-digit reductions in blood pressure combined with 24-hour blood pressure control. *Tekturna/Rasilez* is being developed as a monotherapy and in combination with other anti-hypertensive agents. *Tekturna/Rasilez* has shown additional blood pressure lowering effects when combined with other medications such as hydrochlorothiazide (diuretic), ramipril (ACE inhibitor) or amlodipine (calcium channel blocker) and angiotensin receptor blockers (ARBs). Developed in collaboration with Speedel Pharma AG, *Tekturna/Rasilez* inhibits plasma renin activity, an emerging risk factor for cardiovascular disease, and an extensive profiling program is underway. The intended brand name for the US is *Tekturna* and *Rasilez* in the rest of the world. Health authority reviews are ongoing in both the US and EU. Various *Tekturna/Rasilez* fixed dose combination products are being investigated. First filings are planned for 2007.

LBM642 is a preoxisome proliferator-activated receptor (PPAR) alpha and gamma dual agonist being developed for the treatment of abnormal cholesterol (dyslipidemia) and diabetes. The project is currently in Phase II.

APP018 is a novel ApoA1 mimetic in Phase I trials for the treatment of atherosclerosis. We licensed this product from Bruin Pharmaceuticals.

LCI699 is an aldosterone synthase inhibitor in Phase I being investigated for the treatment of hypertension.

VNP489 is a fixed dose combination of a novel neutral endopeptidase inhibitor and valsartan, now in Phase 1 trials for the treatment of hypertension.

Oncology & Hematology

Novartis Oncology provides a range of innovative therapies and practical solutions for cancer patients. 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.

Novartis ranks No. 3 worldwide in global oncology with a 9.9% market share as of May 2006, according to IMS Health.

This therapeutic area's top-selling product is *Gleevec/Glivec* to treat certain forms of life-threatening gastrointestinal stromal tumors, chronic myeloid and acute lymphoblastic leukemias, as well as dermatofibrosarcoma protuberans and other rare diseases. Other key products include *Femara*, a leading treatment in certain types of breast cancer; *Zometa,* a treatment for certain cancers that have spread to the bones; and *Exjade*, an oral treatment which was recently launched for patients suffering from chronic iron overload.

Important compounds in development include *Tasigna*, formerly known as AMN107, a signal transduction inhibitor that is the most selective BCR-ABL inhibitor studied to date and more potent than *Gleevec/Glivec*; RAD001, a compound that inhibits tumor cell growth and formation of new blood vessels that could potentially be used in combination with other therapies, such as hormonal agents, targeted therapies and cytotoxic drugs; SOM230, a next-generation somatostatin analogue therapy that has the potential to fill a high unmet medical need in three key diseases; and LBH589, a novel, highly potent, oral deacetylase inhibitor that interferes with several cancer-relevant mechanisms.

Key Marketed Products

Exjade (deferasirox) is a breakthrough oral iron chelator that enables patients to be continuously protected from the life-threatening consequences of iron overload. Approved in more than 70 countries including the US and in Europe, *Exjade* is the first once-daily oral iron chelator approved for use in patients with chronic transfusional iron overload who have a wide range of underlying anemias. Iron overload is a cumulative, potentially life-threatening consequence of frequent blood transfusions. Iron starts to build up in the body after as few as 20 transfused units of blood because the body cannot remove it on its own. Patients with congenital and acquired chronic anemias such as thalassemia, sickle cell disease and myelodysplastic syndromes require transfusion as support for their anemia. In the largest prospective global clinical trials program for an iron chelator, *Exjade* has been shown to effectively manage and reduce body iron burden, as measured by liver iron content and serum ferritin. *Exjade* represents the first significant breakthrough therapy for this condition in more than 40 years, offering an alternative therapy for many of the patients who take deferoxamine and currently undergo cumbersome 8- to 12-hour infusions for five to seven nights per week.

Femara (letrozole) is a leading once-daily oral aromatase inhibitor for the treatment of certain forms of breast cancer in post-menopausal women. It works by inhibiting the synthesis of estrogen, a hormone that promotes the growth of some breast cancers. *Femara* was first launched in 1996 and has since received approval for a number of indications. Most recently, *Femara* was approved in the US, Europe and other countries in late 2005 and early 2006 for use as initial adjuvant (post-surgery) treatment of early breast cancer in post-menopausal women. *Femara* also was approved in Japan for the first time in January 2006 for the treatment of all hormone receptor positive, post-menopausal breast cancer. Previously, in late 2004 and early 2005, *Femara* also received approval in the US, Europe and other countries as an extended adjuvant therapy for early breast cancer in post-menopausal women who have received five years of adjuvant tamoxifen therapy. It is also approved globally as first-line treatment for post-menopausal women with hormone receptor positive locally advanced or metastatic breast cancer, and as treatment of advanced breast cancer in post-menopausal women with disease progression following anti-estrogen therapy. In some countries, *Femara* is approved as neo-adjuvant (pre-operative) therapy for early stage breast cancer. *Femara* is currently available in more than 90 countries worldwide.

Gleevec/Glivec (imatinib mesylate tablets/imatinib) is a signal transduction inhibitor approved to treat certain forms of leukemia and gastrointestinal stromal tumors. First launched in 2001 and now available in more than 80 countries, it is one of the first oncology drugs that validates rational drug design based on an understanding of how some cancer cells work. A signal transduction inhibitor interferes with the pathways that stimulate the growth of tumor cells. *Gleevec* (known as *Glivec* outside of the US, Canada and Israel) is indicated for the treatment of newly diagnosed adult and pediatric patients with a form of chronic myeloid leukemia. This condition is a rare form of cancer but one of the most common adult leukemias, and usually tests positive for the presence of the Philadelphia (Ph) chromosome. *Gleevec/Glivec* is also indicated for the treatment of patients with certain forms of gastrointestinal stromal tumor. In 2006, *Gleevec/Glivec* received approval in the EU & US for treatment of Ph-positive acute lymphoblastic leukemia, a rapidly progressive form of leukemia; dermatofibrosarcoma protuberans, a rare solid tumor; hypereosinophilic syndrome, and myelodysplastic/myeloproliferative diseases. In the US, *Gleevec* was also approved for aggressive systemic mastocytosis. In the EU, the application for this indication was withdrawn. The *Glivec* International Patient Assistance Program is now available in 83 countries and has provided treatment at no charge to more than 19,000 patients worldwide who otherwise would not have access to this innovative therapy.

Proleukin (aldesleukin) is a recombinant human interleukin-2 (rhIL-2) for the treatment of adults with renal cell carcinoma and metastatic melanoma. *Proleukin* is a form of immunotherapy that uses the body's natural immune system to fight cancer. *Proleukin* has been demonstrated to induce multiple immunological effects *in vivo* including activation of cellular immunity, and the induction of cytokines tumor necrosis factor, IL-1 and gamma interferon. *Proleukin* received FDA approval for the treatment of metastatic renal cell carcinoma (metastatic kidney cancer) in 1992, and for the treatment of metastatic melanoma (a type of skin cancer) in 1998. It is currently available in 50 countries.

Sandostatin SC*/Sandostatin LAR* (octreotide acetate/octreotide acetate for injectable suspension) is primarily used for the treatment of patients with acromegaly, a chronic disease in adults caused by over-secretion of pituitary growth hormone. Complications associated with acromegaly include cardiovascular disease, respiratory distress such as upper airways obstruction, malignancies such as colon cancer, and carbohydrate intolerance, which can lead to diabetes. *Sandostatin* is a synthetic protein that mimics the action of somatostatin, a naturally occurring hormone. This product is also indicated for the treatment of certain symptoms associated with carcinoid tumors and other types of gastrointestinal neuroendocrine and pancreatic tumors. *Sandostatin* SC faces generic competition in the US. However, patent protection for *Sandostatin LAR*, which represents a significant and growing proportion of the sales of the *Sandostatin* family of products, continues in major markets. See " Intellectual Property" for further information.

Zometa (zoledronic acid) is the leading treatment to reduce or delay skeletal-related events from bone metastases (cancer that has spread to the bones) from solid tumors. These skeletal-related events include fractures, spinal chord compressions, hypercalcemia and bone pain. *Zometa*, a third-generation bisphosphonate, is approved in most key markets for the treatment of hypercalcemia of malignancy, which means tumor-induced excessive levels of calcium, as well as to reduce or delay skeletal-related events in patients with bone metastases from a broad range of cancer types such as prostate, breast, lung and multiple myeloma that have spread to involve bone. In 2005, we distributed a letter to over 100,000 dentists describing changes to the label for *Zometa* and Aredia, another intravenous bisphosphonate used to treat metastatic bone disease, relating to osteonecrosis of the jaw. Novartis continues to communicate with healthcare professionals and patients about reports of this condition. In 2006, *Zometa* received approval for the treatment of patients with bone metastases in Japan. It is the most widely used bisphosphonate (by over one million patients worldwide) for the treatment of bone metastases in cancer patients.

New Indications in Development

Zometa (zoledronic acid) was accepted for EU review for the treatment of bone loss associated with aromatase inhibitors. The multiple benefits of *Zometa* continue to be studied in other clinical settings. There are more than 200 completed and active *Zometa* studies. More than 24,000 patients have completed, or are currently enrolled in, these studies.

Gleevec/Glivec (imatinib mesylate/imatinib) was submitted for regulatory review in Japan as a treatment for Ph+ acute lymphoblastic leukemia and is planned to be submitted for regulatory review in Japan as a treatment for hypereosinophilic syndrome in 2007. *Gleevec/Glivec* is also being studied as a potential treatment for solid tumors, primarily as part of a combination therapy in glioblastoma multiforme, the most common and aggressive of the primary brain tumors. Preclinical data have shown that *Gleevec/Glivec* enhances the effect of chemotherapy in this condition. Phase III trials are in progress in glioblastoma multiforme and as an adjuvant use in treating refractory gastrointestinal stromal tumors. Exploratory Phase II trials are ongoing for idiopathic pulmonary fibrosis and pulmonary arterial hypertension.

Exjade (deferasirox) is being studied in patients with non-transfusional-related iron overload. Phase I/II safety and efficacy studies are enrolling patients with the first data expected in 2008.

Proleukin is in an ongoing Phase II trial for non-Hodgkin's lymphoma. The study's purpose is to examine the efficacy of combining *Proleukin* therapy with rituximab in improving patient outcome.

Compounds in Development

Tasigna (nilotinib, formerly AMN107; tradename pending regulatory approval) is a signal transduction inhibitor with high affinity and specificity to attach itself to Bcr-Abl. *Tasigna* has been shown in preclinical studies to be the most selective Bcr-Abl inhibitor to date and more potent than *Gleevec/Glivec*. Phase II data, which form the basis of the US and EU regulatory submissions, showed that the use of *Tasigna* in patients with Philadelphia chromosome-positive chronic myeloid leukemia reduced or eliminated the presence of this defective chromosome in 51% of Glivec-resistant patients in chronic phase of this disease and led to normalized white blood cell counts in 74% of these patients. The study also showed a similar magnitude of elimination or reduction of these defective cells in 55% of intolerant patients. *Tasigna* was accepted for US and EU review in the fourth quarter of 2006.

PTK787 (vatalanib) is a new molecular entity called an angiogenesis inhibitor that blocks all known vascular endothelial growth factors. The filing strategy for this compound in metastatic colorectal cancer is currently being evaluated based on the results of two Phase III studies CONFIRM 1 and CONFIRM 2, which are studying PTK787 in patients with colorectal cancer compared to and in combination with a chemotherapy regimen. The CONFIRM 1 and 2 trials continue, with final overall survival results, also looking at patients with high serum lactate dehydrogenase, expected in the first half of 2007. Initial results from the CONFIRM 1 trial presented in 2005 showed positive drug effects in advanced colorectal cancer. However, a central review assessment of the primary endpoint of progression-free survival showed a 12% reduction in risk that did not achieve statistical significance. By comparison, a pre-planned analysis of the same endpoint, as assessed by investigators, demonstrated a significant 17% reduction in risk of disease progression. Results of a planned interim analysis of the CONFIRM 2 trial of PTK787 indicated a low probability of demonstrating overall survival benefit in second-line therapy for metastatic colorectal cancer. However a significant 17% reduction in risk of disease progression was also observed. In particular, both CONFIRM 1 and 2 independently confirm PTK787's positive impact on progression-free survival in poor prognosis patients with high serum LDH. This compound is being developed in collaboration with Bayer-Schering of Germany, and if approved, will be marketed jointly with them.

RAD001 (everolimus) is a novel oral inhibitor of the mTOR pathway considered a key target in oncology, which has demonstrated broad clinical activity in multiple tumor types at well-tolerated and efficacious doses. A registration program is underway that includes the RADIANT-1 study in chemotherapy-refractory pancreatic islet cell tumors (pICT) and the RECORD-1 study in metastatic renal cell carcinoma. This program will be expanded in 2007 to include registration trials for refractory carcinoid tumors as well as first- and second-line pICT. RAD001 acts by directly inhibiting tumor cell growth as well as by inhibiting the formation of new blood vessels (angiogenesis). If the chemotherapy refractory pICT trial results are positive, the first regulatory submission could be as early as 2008.

EPO906 (patupilone) is a novel tubulin polymerizing compound known as an epothilone that inhibits cancer cells with a similar mechanism to paclitaxel, a taxane that is a member of one of the most successful classes of anti-cancer treatments. In pre-clinical trials, EPO906 has shown more potency than paclitaxel and good activity in paclitaxel-resistant tumors. In Phase II, responses have been observed in several solid tumors. Phase III studies in ovarian cancer commenced in 2005. However, patient enrollment in these trials has been unexpectedly slow, thus delaying submission. As a result, we have amended the protocol for these trials, and have expanded the number of trial centers. We now expect the compound to be ready for submission in 2009.

SOM230 is a somatostatin analog in Phase III development for the treatment of Cushing's Disease, a rare disorder characterized by excessive excretion of the hormone cortisol from a pituitary adenoma (tumor), a condition for which there is no approved medical therapy. SOM230 is in Phase II development for refractory carcinoid tumors with a registration trial set to begin in the first quarter of 2007. SOM230 is also in Phase II development for acromegaly and gastroenteropancreatic/ neuroendocrine tumors.

Xyotax (paclitaxel poliglumex) is a biologically-enhanced chemotherapeutic that links paclitaxel, the active ingredient in Taxol®, to biodegradable polyglutamate polymer, which results in a new chemical entity. Under development by CTI, *Xyotax* is an investigational agent in Phase III clinical trials for the treatment of non-small cell lung cancer in women, and for other cancers. Enrollment in the PIONEER lung cancer clinical trial with *Xyotax* was halted. We plan to follow up PIONEER with a new Phase III in which we would study women with advanced lung cancer and normal estrogen levels.

LBH589 is a deacetylase inhibitor in Phase II development for the treatment of cutaneous T-cell lymphoma and in Phase I for the treatment of hematological and solid tumors.

LBQ707 (gimatecan) is a cytotoxic in Phase II development for the treatment of solid tumors. This compound is a novel oral topoisomerase I inhibitor. Preclinical data have shown greater potency than topotecan or irinotecan as well as activity in cell lines resistant to these two anti-cancer agents. Confirmed partial responses have been seen in Phase I studies in non-small cell lung cancer, breast cancer and colorectal cancer. An improved formulation is currently in Phase I studies in a range of solid tumors.

PKC412 (midostaurin) is a multi-targeted (including FLT3) kinase inhibitor in Phase II development for the treatment of acute myeloid leukemia (AML). Ongoing and planned studies are investigating PKC412 in combination with standard first line chemotherapy. An open label, uncontrolled multiple cohort trial found that PKC412 with chemotherapy can be given safely and tolerably in newly diagnosed AML patients who are less than 60 years old. This study showed a trend for a higher complete response rate in patients with mutated FLT3 AML. Our future plans for this compound include a Phase III trial in collaboration with the Cancer and Leukemia Group B, and other groups.

AEE788 is a tyrosine kinase protein inhibitor that targets EGFR, HER2 and VEGFR2. It is in Phase I development for the treatment of solid tumors.

HCD122 is an anti-CD40 monoclonal antibody in Phase I development for the treatment of several hematologic (CLL and multiple myeloma) tumors. In preclinical studies, HCD122 has been shown to be more potent than rituximab in primary patient CLL cell lines. HCD122 is being developed in conjunction with XOMA.

RAF265 is a novel, oral small molecule kinase inhibitor that has potent inhibitory activity against mutant B-Raf kinase and additional antiangiogenic activity through inhibition of VEGFR2. It is in Phase I development for the treatment of melanoma.

TKI258 (dovitinib) is a multi-targeted tyrosine kinase inhibitor (FGF, VEGF, PDGF, FLT3, cKIT) in Phase I development for the treatment of hematologic (AML and multiple myeloma) and solid (melanoma) tumors. Preclinical data have shown activity in a number of other solid tumors such as prostate and superficial bladder cancer.

LBY135 is a monoclonal antibody agonist to DR5, with activity shown in multiple tumors. LBY135 has shown activity against a broad range of tumor cell lines *in vitro* and *in vivo* and synergistic action in combination with chemotherapies and other targeted agents. A Phase I, 2-arm study in advanced solid tumors is ongoing.

BEZ235 is a novel small molecule PI3K inhibitor. Phase I studies are about to begin, targeting patients with advanced breast cancer, glioma and prostate cancer.

ABJ879 has been terminated.

Neuroscience

Novartis has been a leader in neuroscience for more than 50 years, having pioneered early breakthrough treatments for disorders of the central nervous system, including Alzheimer's disease, Parkinson's disease, epilepsy, depression, migraine, attention deficit hyperactivity disorder and schizophrenia.

Among our leading products are *Exelon*, approved in more than 70 countries and now the only cholinesterase inhibitor available to treat both mild- to moderate-Alzheimer's disease and mild- to moderate-dementia associated with Parkinson's disease, and the anti-epileptic *Trileptal*, which since its first approval in 1990 is widely used to treat adults and children suffering from partial epilepsy. A growth driver for Neuroscience is *Stalevo*, an optimized levodopa product for the treatment of Parkinson's disease that has been successfully launched worldwide.

Novartis is actively developing new compounds and is committed to addressing unmet medical needs, as well as to supporting patients and their families affected by these disorders. A key project in development is FTY720 (fingolimod), which started Phase III trials in early 2006 and has the potential to become the first oral, once-daily disease modifying treatment for patients with relapsing multiple sclerosis. Others include *Exelon Patch*, a skin patch currently being developed for the treatment of Alzheimer's disease, and AG0178, under development for the treatment of major depressive disorder.

Key Marketed Products

Clozaril/Leponex (clozapine) remains a leading anti-psychotic for treatment-resistant schizophrenia. First launched in the 1970s and facing generic competition in the US and many other markets, this product is also indicated for the prevention of suicidal behavior in patients with schizophrenia or schizoaffective disorder.

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

Exelon (rivastigmine tartrate) is a symptomatic treatment for mild to moderate dementia of the Alzheimer's type and is the only approved treatment for mild to moderate dementia associated with Parkinson's disease. It belongs to a class of drugs known as cholinesterase inhibitors that increase neurotransmitter activity in the brain. First approved for the treatment of Alzheimer's disease in 1997, *Exelon* is currently used in over 70 countries.

Focalin/Focalin XR (dexmethylphenidate HCl) is approved in the US for the treatment of attention deficit hyperactivity disorder (ADHD). *Focalin XR,* a long-acting formulation, was approved in the US in 2005 for the treatment of pediatric and adult ADHD. *Focalin XR* uses SODAS technology, a proprietary drug delivery technology under license from Elan.

Ritalin LA (methylphenidate hydrochloride) is a once-daily formulation of *Ritalin* launched in 2002 for the treatment of ADHD. This product, which removes the need for a midday dose, has been approved in a number of countries, including the US and certain countries in the EU and Latin America. *Ritalin LA* uses SODAS technology, a proprietary drug delivery technology under license from Elan.

Stalevo (carbidopa/levodopa/entacapone) is an optimized levodopa product indicated for the replacement of traditional levodopa therapy for Parkinson's disease patients experiencing signs and symptoms of the disease at the end-of-dose "wearing off." This product combines levodopa, considered the standard treatment for Parkinson's disease, with the enzyme inhibitors carbidopa and entacapone. It has been shown to significantly improve the ability of patients with Parkinson's disease to perform everyday tasks and to reduce symptoms associated with the disease. Licensed

from Orion Pharma, *Stalevo* was first launched in the US in 2003 and is now available in many countries in Europe, Latin America and Asia-Pacific. Orion retains exclusive rights to this product in certain Scandinavian countries, Germany, the UK and Ireland.

Tegretol XR/CR (carbamazepine) was launched in 1996 and is the long-acting formulation of *Tegretol*, which has been a mainstay for the treatment of epileptic seizures since 1962. *Tegretol XR/CR* is also indicated in the US for the treatment of pain associated with trigeminal neuralgia, which is characterized by attacks of intense pain affecting the face, as well as for the treatment of acute mania and bipolar affective disorders in the EU.

Trileptal (oxcarbazepine) is an anti-epileptic drug for the treatment of partial seizures as adjunctive or monotherapy in both adults and children aged four years and above. In the US, *Trileptal* has also been approved for adjunctive therapy for children aged two and above. *Trileptal* acts by stabilizing neuronal functions, thereby controlling and limiting the spread of seizures. It was first approved in Denmark in 1990, in the rest of Europe in 1999, and in the US in 2000.

New Indications in Development

Comtan (entacapone) was filed in Japan in 2005 for the treatment of Parkinson's disease.

Exelon Patch (rivastigmine base) is the first transdermal patch in development for the treatment of mild to moderate dementia of Alzheimer's type, and of mild to moderate dementia associated with Parkinson's disease. It has been submitted for approval in the US, the EU and other countries. *Exelon Patch* has been shown to deliver efficacy equivalent to the highest dose of *Exelon* capsules with markedly improved tolerability.

Compounds in Development

AGO178 (agomelatine) is a novel oral once-daily treatment that has the potential to become a new approach for the treatment of major depressive disorder, a condition estimated to affect one in ten adults in the US alone. We licensed agomelatine from Servier in March 2006. Under the terms of the agreement, we acquired the exclusive rights to further develop and market AGO178 in the US and several other countries. Servier retained the rights to develop and market the product in the rest of the world. Our US Phase III clinical trial program was agreed upon with FDA and we commenced these studies at the end of 2006. Servier's submission for EU approval was not supported by regulators due to insufficient data. This decision is not expected to have any effect on our development strategy and regulatory process in the US, with submission planned for 2008.

LIC477 (licarbazepine) is a sodium channel blocker. A Phase III program was initiated in late 2004 for the treatment of acute manic episodes in bipolar disorders. The first study in acute mania monotherapy was not positive. However, other trials in acute mania adjunctive therapy are ongoing. Regulatory filing is planned to occur in 2008.

FTY720 (fingolimod) is seeking to become the first oral disease modifying treatment available for patients with relapsing multiple sclerosis (MS). FTY720 is the first sphingosine-1-phosphate receptor modulator in development for MS and has the potential to provide an important new option for this disabling neurological condition, estimated to affect more than 2.5 million people worldwide. Data from a 6-month Phase II study showed that FTY720 reduced inflammatory disease activity as seen on MRI by up to 80%, and relapse rate by more than 50%, compared to placebo. An extension of the Phase II study is ongoing with placebo patients switched to FTY720. The extension of the Phase II trial demonstrated a sustained reduction in relapses and inflammation with low disease activity maintained over two years. The Phase III program started in early 2006 and is recruiting worldwide.

ATI355 is an anti-NOGO A monoclonal antibody currently in Phase I/IIa development for the treatment of acute spinal cord injury.

AFQ056 is a novel mGlu5 receptor antagonist in Phase I development for anxiety.

BAF312 is a sphingosine-1-phosphate receptor modulator in Phase I development for the treatment of multiple sclerosis.

BGG492 is an AMPA antagonist in Phase I development for treatment of epilepsy.

CAD106 is a novel beta-amyloid vaccine in Phase I for the treatment of Alzheimer's disease.

XBD173, SAD448 and SAB378 have been terminated.

Respiratory

Novartis is bringing to the market a number of important new medicines in the respiratory field, led by *Xolair*, a novel biological therapy that targets an underlying cause of allergic asthma and has been approved in Europe, the US, and several countries in the rest of the world. Our leading development compound is QAB149 (indacaterol), a once-daily long-acting beta-2 agonist that has begun Phase III trials and provides the cornerstone for an ambitious program to develop a range of once-daily inhaled therapies for asthma and chronic obstructive pulmonary disease (COPD). We are also continuing to commercialize the long-acting bronchodilator *Foradil* for the treatment of asthma and COPD.

Key Marketed Products

Foradil (formoterol fumarate) is a long-acting bronchodilator that offers onset of action within five minutes and 12-hour relief of symptoms for patients with asthma and COPD, which includes chronic bronchitis and emphysema. It was first registered and launched in Europe in 1994. US approval was granted in 2001, and in 2002 we licensed *Foradil* to Schering-Plough in the US. We continue to market and distribute the product in other areas of the world. *Foradil Aerolizer* is a single-dose dry powder inhaler, while a metered-dose inhaler is available in some countries. *Foradil Certihaler* was approved in the US in December 2006, and had previously been approved in 27 other countries. *Certihaler* is a novel, breath-activated multi-dose dry powder inhaler technology developed by SkyePharma. *Foradil Certihaler* was launched in Germany and Switzerland in September 2005, but was withdrawn due to a patient mishandling issue and is not currently marketed there.

TOBI (tobramycin) is well-established as possibly the most effective treatment for chronic pulmonary Pseudomonas aeruginosa infection in cystic fibrosis (CF) patients. Chronic Pseudomonas aeruginosa infection is associated with progressive deterioration in pulmonary function, the leading cause of mortality in this disease. *TOBI* has proven long-term efficacy in fighting Pseudomonas aeruginosa, providing significant and sustained improvement in pulmonary function and reducing the need for hospitalization and the use of intravenous-administered antibiotics. *TOBI* has a proven long-term safety profile and its unique delivery to the lung (via inhalation) ensures that high doses are delivered directly to the site of infection, while minimizing systemic absorption. *TOBI* is the only drug that has secured FDA approval in the US for fighting chronic Pseudomonas aeruginosa infections in CF patients, and it has been commercially available there since 1997. *TOBI* has also been also marketed throughout Europe since 1999. Novartis acquired the marketing and distribution rights for *TOBI* as a result of its acquisition of Chiron Corporation.

Xolair (omalizumab) is the first humanized therapeutic antibody for the treatment of allergic asthma and the first approved therapy designed to target the antibody IgE, a key underlying cause of the symptoms of allergic asthma. *Xolair,* which is dosed by subcutaneous injection every two or four weeks, gained regulatory approval in the US and Canada in 2003 for use in adults and children

39

over age 12 with moderate-to-severe allergic asthma whose symptoms are inadequately controlled with inhaled corticosteroids. EU approval was granted in October 2005 for use in adults and adolescents with severe persistent allergic asthma that is inadequately controlled by current medication. This product is being jointly developed with Genentech, Inc. and Tanox, Inc., and is co-marketed in the US by Novartis Pharmaceuticals Corporation and Genentech.

New Indications in Development

Xolair (omalizumab) is in development for the treatment of asthma in children 6-11 years of age. Enrollment in the Phase III trial was completed in October 2006. In addition a liquid formulation of *Xolair* in a pre-filled syringe is in Phase II development to potentially improve convenience of administration. Separately, Novartis is evaluating a safe path forward for the development of *Xolair* for the treatment of peanut allergy following the previously-reported 2005 discontinuation of a clinical trial for this indication.

Compounds in Development

QAB149 (indacaterol) has the potential to be the new generation once-daily beta-2 agonist that offers combined sustained 24-hour bronchodilation with fast onset of action for the treatment of asthma and chronic obstructive pulmonary disease (COPD). Results from Phase II studies for QAB149 demonstrated good tolerability and a favorable safety profile. Phase III studies with QAB149 began in the fourth quarter of 2006 in COPD patients. Initial Phase III clinical trials will be carried out using a single-dose dry powder inhaler device. In addition, Novartis and Schering-Plough are jointly developing a once-daily fixed dose combination of QAB149 and Schering-Plough's inhaled corticosteroid mometasone (the active ingredient in Asmanex®). The first clinical studies are expected to start in 2007.

MFF258 (formoterol and mometasone) is a new treatment in development for asthma and COPD which combines the well-established clinical benefits of Novartis' long-acting beta-2 agonist *Foradil* (formoterol fumarate) with mometasone. We are co-developing this combination product with Schering-Plough. With the MFF258 combination, patients have the potential to benefit from the long-acting 12-hour bronchodilator efficacy of *Foradil* and Asmanex within a single patient-friendly metered dose inhaler device.

TMB100 Tobramycin Powder for Inhalation (TIP) is a new tobramycin formulation currently in Phase III for cystic fibrosis (CF). TIP is expected to improve drug delivery and reduce the treatment burden for CF patients.

ACZ885 is a monoclonal antibody directed against human IL-1-beta in Phase II development for the treatment of COPD.

NVA237 (glycopyrronium bromide) is a novel inhaled formulation of glycopyrronium bromide, which is a once-daily long-acting muscarinic antagonist bronchodilator (also known as a long acting anticholinergic). NVA237 is being developed by Novartis both as a monotherapy and combination treatment for COPD. In clinical trials, NVA237 has demonstrated efficacy and safety comparable to other treatments and potentially a faster onset of action. NVA237 has the potential to become an important addition to the available therapeutic options to treat COPD.

QVA149 (indacaterol and glycopyrronium bromide) is a fixed dose combination of QAB149 and NVA237, in Phase II development for COPD.

QAE397 is a corticosteroid in Phase II development for the treatment of asthma.

QAT370 is a muscarinic antagonist in Phase II development for the treatment of COPD.

ABN912 and QAP642 have been terminated.

Infectious Diseases, Transplantation & Immunology (IDTI)

IDTI combines the capabilities, leadership and infrastructure of Novartis in transplantation and immunology with the growth potential of the expanding infectious diseases pipeline.

Novartis is a world leader in transplantation and immunology. With the discovery and introduction of cyclosporine more than 20 years ago, Novartis revolutionized the field of transplantation and now has the broadest portfolio of immunosuppressants on the market, including *Neoral*, *Simulect*, *myfortic* and *Certican*, and an innovative pipeline, seeking to develop new mechanisms of action. This allows for effective personalized care in a field where individualized therapy is most needed.

Our ambition in the field of infectious diseases is to build a sustainable platform to address still unmet needs in the treatment of life-threatening infections. The acquisitions of *Cubicin* (for certain territories) and *Mycograb* have taken us a big step further in this direction. In hepatitis our goal is to achieve a leadership position by 2013, and we have made significant progress by building a portfolio of agents for hepatitis B and C with complementary mechanisms of action. The most advanced of these, *Tyzeka/Sebivo*, received US approval in October 2006 as a new therapy for patients with chronic hepatitis B. We also market *Famvir* for herpes and *Coartem* for malaria.

Key Marketed Products

Certican (everolimus) is a type of immunosuppressant called a proliferation signal inhibitor (or mTOR inhibitor) that targets the primary causes of allograft dysfunction, or chronic rejection, of a transplanted heart or kidney. *Certican* is used in combination with low-dose *Neoral* and corticosteroids for the prevention of organ rejection in heart and kidney transplant recipients. First approved in Europe in 2003, *Certican* has been launched in over 60 countries including most of the EU members and Switzerland.

Coartem/Riamet (artemether and lumefantrine) is an effective and well-tolerated anti-malarial treatment for adults and children that achieves cure rates of up to 95%, even in malaria patients living in areas with multi-drug resistance. It is indicated for treatment of acute, uncomplicated falciparum malaria, the most dangerous form of malaria. *Coartem* is the only pre-qualified fixed-dose combination of the two agents artemether, an artemisinin derivative, and lumefantrine, known as the Artemisinin Combination Therapy. *Coartem*, which is marketed commercially as *Riamet* in some countries, was co-developed by Novartis in collaboration with Chinese partners. The active ingredients (artemether and lumefantrine) are predominantly produced in China by Chinese suppliers, and pharmaceutical production is done in China and the US by Novartis. First approved in 1998, *Coartem* is currently registered in 78 countries. We delivered 62 million treatments without profit to public sector agencies of malaria-endemic countries in 2006. In September 2006, we decreased the price of Coartem to an average of $1.00 per treatment, in an effort to improve access to this therapy. The World Health Organization added *Coartem* to its List of Essential Medicines in 2002, and we have significantly increased production capacity to help meet a significant surge in demand for the Artemisinin Combination Therapy.

Cubicin (daptomycin) is an intravenous antibiotic approved in Europe for the treatment of complicated skin and soft-tissue infections caused by Gram-positive bacteria. It is the first in a new class of antibiotics called cyclic lipopeptides and is very active against methicillin-resistant Staphylococcus aureus (MRSA). MRSA rates continue to increase in the EU and cause some of the most serious hospital infections. *Cubicin* was added to our portfolio as a result of our acquisition of Chiron in April 2006. Cubist Pharmaceuticals retains the rights for the US and several other countries, while Novartis has exclusive rights in Europe, Australia, New Zealand, India, Russia, Turkey, and some Latin American and Middle Eastern countries.

Famvir (famciclovir) is an anti-viral agent for the treatment of recurrent genital herpes, a sexually-transmitted, lifelong disease, and shingles (herpes zoster), which is caused by the reactivation of the highly contagious variacella-zoster virus, the same virus that causes chickenpox. Other indications include the treatment of recurrent mucocutaneous herpes simplex infections in HIV-infected patients. In the US, Famvir is also indicated for the treatment of recurrent herpes labialis (cold sores) in immunocompetent patients.

myfortic (mycophenolic acid, mycophenolate sodium, USP) is approved for use in combination with cyclosporine and corticosteroids to prevent rejection in patients with kidney transplants. *myfortic* has been approved in over 50 countries including Switzerland (the first approval in 2003), the US, Canada, Germany, France, Italy, Spain, the UK, Australia, India, Brazil and a number of Latin American countries. *myfortic* was filed in China in Q4 2006.

Neoral (cyclosporine, USP MODIFIED) is a micro-emulsion formulation of cyclosporine, an immunosuppressant to prevent organ rejection following a kidney, liver or heart transplant. *Neoral* has become a commonly-used primary immunosuppressant, according to IMS Health, after largely replacing its predecessor *Sandimmun/Sandimmune*, which revolutionized organ transplantation following its introduction in 1982. First launched in 1995, *Neoral* was designed to provide improved and constant absorption of cyclosporine, the active ingredient. It is also indicated for treating select autoimmune disorders such as psoriasis and rheumatoid arthritis. Despite our patent protection for *Neoral*, generic companies have launched competing products in the US, Europe and elsewhere, and will continue to compete with us vigorously. (See "Intellectual Property" for further information).

Tyzeka/Sebivo (telbivudine, formerly LDT600*)* is a new treatment for patients with chronic hepatitis B that provides rapid and profound viral suppression. This product, which is known as *Tyzeka* in the US and *Sebivo* in the rest of the world received its first major approval in Switzerland in August 2006, followed by US approval in October. *Tyzeka* has been developed in collaboration with Idenix Pharmaceuticals Inc. pursuant to an agreement signed in May 2003. Under this agreement, Novartis and Idenix will co-promote the product in the US, France, Germany, Italy, Spain and the UK. Novartis has exclusive commercialization rights in the rest of the world.

Simulect (basiliximab) is a chimeric monoclonal antibody that suppresses interleukin-driven proliferation of T-cells. Simulect is approved for the prophylaxis of acute organ rejection in patients receiving renal transplantation when used as part of an immunosuppressive regimen that includes cyclosporine, and corticosteroids.

New Indications in Development

Certican (everolimus) was submitted to the FDA for approval for use as an immunosuppressant, and the FDA has issued approvable letters for *Certican* for kidney and heart. In November 2005, an FDA Advisory Committee recommended that more data be provided to substantiate the safety of the use of *Certican* together with *Neoral* before US approval could be granted as prophylaxis against rejection in heart transplant recipients. In addition, the heart indication was filed in Japan in 2005 and approval is expected in early 2007.

Tyzeka/Sebivo (telbivudine, formerly LDT600*)* was submitted for approval in the EU, China and other key markets in the first quarter of 2006 for the treatment of chronic hepatitis B.

Cubicin (daptomycin) was submitted to the EU in July 2006 for the treatment of the additional indications of Staphylococcus aureus bacteremia and Infective Endocarditis.

Compounds in Development

Mycograb is an antibody fragment to be used in combination with antifungal agents for treatment of invasive Candida infections, which was acquired as part of our acquisition of NeuTec in June 2006. In November 2006, the EU's Committee for Medicinal Products for Human Use (CHMP) issued a

negative opinion on the 2005 *Mycograb* submission by NeuTec. The CHMP opinion was not linked to the efficacy of the compound. The Committee concluded that there were insufficient data relating to the manufacturing and characterization of the product to determine the safety of the compound. Novartis is committed to working with the CHMP to determine appropriate next steps. The US filing is planned for 2009.

TFP561 (tifacogin) is a recombinant tissue factor pathway inhibitor now in Phase III. Tifacogin joined our portfolio with the acquisition of Chiron in April 2006.

ABF656 (*Albuferon* albumin-interferon alpha 2b) is a novel protein produced by genetic fusion of interferon alpha and human serum albumin. The compound has recently entered Phase III for the treatment of chronic hepatitis C. We have licensed this compound from Human Genome Sciences Inc. with the right to co-promote or co-market the compound in the US and to market it on our own in the rest of the world.

Aurograb is an innovative antibody therapy approach for serious staphylococcal infections now in Phase II. *Aurograb* was acquired as part of our acquisition of NeuTec in June 2006.

LDC300 (valtorcitabine) is an oral antiviral being studied for use in combination with *Tyzeka*/*Sebivo* for the treatment of hepatitis B. This nucleoside analog is currently in Phase II. The compound is being developed in collaboration with Idenix Pharmaceuticals Inc. pursuant to an agreement signed in May 2003. If approved for sale, Novartis and Idenix will co-promote LDC300 in the US, France, Germany, Italy, Spain and the UK. Novartis has exclusive commercialization rights in the rest of the world.

NM283 (valopicitabine) is the most advanced hepatitis C virus (HCV) polymerase inhibitor in development. This Phase II compound has been shown to be effective in combination with interferons, making it potentially attractive for use with *Albuferon*. Dose-related gastrointestinal side effects have been observed in a Phase IIb trial, leading to a reduction to 200 mg and 400 mg in the naive and to 400 mg in the non-responder trial. Further trials are ongoing to also assess potential drug-drug interaction with ribavirin. NM283is being developed in collaboration with Idenix Pharmaceuticals Inc. If approved for sale, Novartis and Idenix will co-promote NM283 in the US, France, Germany, Italy, Spain and the UK. Novartis has exclusive commercialization rights in the rest of the world.

ANA975 is a novel, oral toll-like receptor 7 agonist for the treatment of hepatitis C licensed from Anadys Pharmaceuticals, Inc. Phase II clinical studies were suspended in 2006 to further investigate new observations. No serious adverse events have been observed in humans to date. A repeat toxicology study was initiated in the fourth quarter of 2006.

AEB071 is a novel protein kinase C inhibitor being developed with the goal of becoming the first oral compound to replace calcineurin inhibitors as primary immunosuppressants. The compound is currently in Phase II trials for the prevention of organ rejection.

NIM811 is a cyclophilin inhibitor that is in Phase II development for the treatment of chronic hepatitis C.

RSV604 is a selective inhibitor of viral replication, currently in Phase I studies for the treatment of respiratory syncytial virus infection. RSV604 has been in-licensed from Arrow Pharmaceuticals.

SBR759 is a polynuclear iron (III) starch/saccharose complex which binds selectively to phosphate ions through chelation. It is in Phase I development for the treatment of hyperphosphatemia in patients with chronic kidney disease. SBR759 was acquired from Sebo GmbH of Germany.

Ophthalmics, Dermatology, Gastrointestinal & Urinary (ODGU)

In ophthalmics, our research and development is focused on treatments for "Back of the Eye" diseases as well as on "Dry Eye" conditions and glaucoma. These areas are characterized by high growth

and significant unmet medical need. The key area of focus within "Back of the Eye" is "wet" age-related macular degeneration (AMD), a leading cause of blindness in people over age 50. Our ophthalmics business has built a leadership position in wet AMD with its flagship product *Visudyne*. We are now in the launch phase for *Lucentis*, a revolutionary product which is the first to show improved vision in patients with wet AMD. *Lucentis* was approved in Switzerland in August 2006, and approval is expected in the EU in January 2007.

Our focus in dermatology is on the treatment of two very common diseases the inflamed skin condition known as atopic dermatitis, or eczema, and fungal nail infections. *Elidel* was the first non-steroid cream approved for eczema, a disease that affects about 10% of children in the US, while *Lamisil* tablets are the most frequently prescribed treatment worldwide for fungal nail infection.

We have established Novartis in the gastrointestinal market with the launch of *Zelnorm/Zelmac* for the treatment of irritable bowel syndrome with constipation (IBS-C), a motility and sensory disorder characterized by abdominal pain, bloating and constipation. More than 30 million people in the US are estimated to suffer from IBS-C, and *Zelnorm/Zelmac* is the first and only medication approved by major health authorities to treat this condition. *Zelnorm/Zelmac* is also approved for the treatment of chronic idiopathic constipation in the US and several other countries including Canada, Mexico and Turkey.

Key Marketed Products

Elidel (pimecrolimus) was the first non-steroid cream approved for the treatment of atopic dermatitis, a skin condition commonly known as eczema, in adults and children. It is one of the first new eczema treatments introduced since the 1950s, when topical corticosteroids historically the mainstay of therapy became available. First launched in 2002 in the US, *Elidel* is now registered in approximately 90 countries, including many EU markets. Following discussions with the FDA and EMEA, prescribing information for *Elidel* (dispensed only as a topical cream) was updated in February and May 2006. In the US, a boxed warning and medication guide make clear that no causal link has been established between the use of *Elidel* and rare post-marketing reports of malignancy. In the EU, a similar warning was also added to the prescribing information. The concern of the health authorities for a potential risk for malignancies exists based on the use of oral calcineurin inhibitors at high doses. A similar change in labeling has been made to the other product in this class. While we believe this action is not substantiated by scientific or clinical evidence, we agreed to make the requested changes and will continue to communicate them to physicians and patients so that they can continue to use *Elidel* as labeled to effectively manage eczema. We are confident in the safety and efficacy of *Elidel*, which is one of the most thoroughly researched dermatology products in the world and continues to be supported with significant ongoing clinical trials.

Enablex/Emselex (darifenacin) is a once-daily, oral, selective M3 receptor antagonist for the treatment of Overactive Bladder. *Enablex* is the trade-name in the US, Canada, Latin America, Australia and South Africa, while *Emselex* is the trade-name in Europe and most other countries. This product was approved in the EU in October 2004 and approved in the US in December 2004. It is now available in over 10 countries, including the US, Germany and the UK. *Enablex/Emselex* has been shown to reduce the number of weekly urge urinary incontinence episodes by up to 83% versus placebo.

Lamisil (terbinafine) is the leading therapy for onychomycosis, also known as fungal nail infection. *Lamisil* tablets kill the fungus that causes the infection at its source, working through the patient's bloodstream. This product was first launched in 1991 and is now available in more than 90 countries, with the US the leading market. *Lamisil* tablets are also approved for treating athlete's foot (*tinea pedis*) and fungal infection of the scalp (*tinea capitis*) in some countries, though not yet in the US. Our Consumer Health Division's OTC Business Unit markets over-the-counter cream formulations of *Lamisil* for use in treating athlete's foot in many markets, including the US.

Generic forms of terbinafine were launched in a number of European markets in 2005, with generic competition expected in the US in July 2007 following the expiration of exclusivity.

Lucentis (ranibizumab) is a recombinant humanized high affinity antibody fragment that binds to vascular endothelial growth factors. It is designed to penetrate the retina to decrease permeability and inhibit the formation of choroidal neovascularization, which leads to blindness in AMD patients. *Lucentis* is the first approved drug for wet AMD patients that has been shown in Phase III studies to improve vision and return the ability to do life-affirming everyday activities such as reading. *Lucentis* was approved by the US FDA in June 2006, in Switzerland in August 2006, and in the EU in January 2007. *Lucentis* is developed in collaboration with Genentech, which holds the rights to market the product in the US.

Visudyne (verteporfin) is a light-activated drug 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 low-energy laser light is then shone into the patient's eye to activate the drug. First launched in 2000, *Visudyne* is commercially available in over 75 countries for the treatment of predominantly classic subfoveal choroidal neovascularization (CNV), a major cause of vision loss caused by AMD. It is also approved in over 40 countries other than the US for the treatment of occult subfoveal CNV secondary to AMD, including the EU, where it gained approval in 2002. In addition, *Visudyne* is approved in over 45 countries, including the EU, US and Canada, for the treatment of subfoveal CNV due to pathologic myopia (severe near-sightedness). In Japan, *Visudyne* is approved for all types of subfoveal CNV secondary to AMD. Further geographic expansion is planned, including in China.

Zaditor/Zaditen (ketotifen fumarate) is an eye drop that provides fast and lasting relief of symptoms in patients suffering from ocular allergy. This product, which is known as *Zaditor* in the US and *Zaditen* in other markets, works through multiple mechanisms of action to provide relief within minutes and a duration of action of up to 12 hours. *Zaditor/Zaditen* was first launched in Japan and has been approved in more than 60 countries, including the US and the EU. *Zaditor* was recently approved by the FDA for over-the-counter use. It will be available OTC beginning in January 2007.

Zelnorm/Zelmac (tegaserod) is the first in a new class of medicines known as serotonin-4 (5-HT4) receptor selective agonists approved for the treatment of the multiple symptoms associated with irritable bowel syndrome with constipation (IBS-C) in women. This product, which is known as *Zelnorm* in North America and South Africa and as *Zelmac* in other markets, acts by decreasing the visceral sensitivity of the intestinal tract, increasing intestinal secretion, and increasing gastrointestinal motility. This reduces the impact of symptoms such as abdominal pain, bloating and constipation. In 2004, *Zelnorm* received US approval to become the first treatment approved for chronic idiopathic constipation in men and women under age 65. First launched in 2001 in Mexico, this product has now been approved in more than 55 countries. *Zelnorm* is also approved for the treatment of chronic idiopathic constipation in more than 25 countries including the US, Canada and Mexico.

New Indications in Development

Lamisil (terbinafine) has been under development for the treatment of ringworm of the scalp (tinea capitis). Product registration files have been submitted in the US. In addition, a topical formulation of *Lamisil* (nail lacquer) is in development for the treatment of onychomycosis. Lamisil lacquer entered Phase III trials in December 2006, with US filing expected in early 2009.

Zelnorm/Zelmac (tegaserod maleate/tegaserod) received a negative opinion from EMEA in May 2006 for the treatment of irritable bowel syndrome with constipation in women. Novartis will pursue regulatory options with positive EU countries in 2007. In addition, *Zelnorm/Zelmac* has finalized Phase III studies for the treatment of functional dyspepsia and we are in discussion with FDA concerning the submission of this data.

Elidel (pimecrolimus) is in Phase III development for atopic dermatitis in infants under two years old. In addition, it is in Phase II development for the treatment of dry eye in a novel drops formulation.

Lucentis (ranimizumab) is in Phase II development for the treatment of Diabetic Macular Edema.

Sandostatin LAR (diabetic retinopathy) and *Visudyne* (predominant occult AMD) have been terminated.

Compounds in Development

OPC759 (rebamipide) is a selective mucin secretagogue, currently in Phase III studies for the treatment of dry eye. This compound was in-licensed from Otsuka Pharmaceuticals Corporation, Japan.

PTK787 (vatalanib) is currently in development for the treatment of age-related macular degeneration (all forms of wet AMD) and is in Phase II. We are jointly developing PTK787 with Schering AG for certain oncology indications. We have entered into an agreement with Schering granting us exclusive rights to develop and commercialize PTK787 for the treatment of ophthalmic conditions.

AEB071 is a PKC inhibitor currently in Phase I for the treatment of psoriasis.

AHT956 is a PKC inhibitor currently in Phase I for the treatment of psoriasis.

RKI983 is a Rho kinase inhibitor, currently in Phase I and investigated for topical treatment of glaucoma. This compound was in-licensed from Senju Pharmaceutical Co, Japan, and is under the sub-license rights granted by Mitsubishi Pharma Corporation to Senju.

Arthritis & Bone

An important focus in this therapeutic area is the bone disorder osteoporosis, a progressive disease that causes bones to become thin and porous, increasing the risk of fractures. Building on the heritage of *Miacalcin/Miacalcic*, Novartis has a number of treatments in development for this disease, which is estimated to affect up to one in three women over age 50 worldwide, according to the International Osteoporosis Foundation. The most advanced compound in development for bone disorders is *Aclasta/Reclast*, which has been approved in approximately 50 countries including the EU and Canada for the treatment of Paget's disease of the bone, and is under submission to the FDA in the US. *Aclasta/Reclast* is also being developed for use in treating various forms of osteoporosis.

Building on our experience with *Voltaren*, a leading pain medication in osteoarthritis for more than 30 years, we launched the selective COX-2 inhibitor *Prexige* in more than 25 countries such as Brazil, Mexico, Australia, New Zealand, South Africa, UK, Germany and Canada. In the EU, the mutual recognition procedure was successfully completed in October 2006 and launches in Europe are expected throughout 2007/2008.

Key Marketed Products

Aclasta/Reclast (zoledronic acid 5 mg for infusion; US tradename *Reclast* pending regulatory approval) is an intravenous bisphosphonate being developed for the treatment of various metabolic bone diseases including osteoporosis and Paget's disease of the bone. *Aclasta/Reclast*, approved in approximately 50 countries worldwide including the EU and Canada for the treatment of Paget's disease, was first launched in Germany in May 2005 and launches are ongoing. Given as a single 15-minute infusion, *Aclasta/Reclast* was shown in a head-to-head Phase III study published in the *New England Journal of Medicine* to offer superior efficacy, faster onset of action and a longer period of remission compared to risedronate, the

current oral standard treatment in Paget's disease. Zoledronic acid at a different dosing regimen is marketed for oncology indications under the brand name *Zometa* (zoledronic acid 4 mg for infusion).

Combipatch/Estalis (estradiol hemihydrate & norethisterone acetate transdermal system) is a combination estrogen/progestin treatment for symptoms of estrogen deficiency in post-menopausal women, and for 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 names *Combipatch* and *Estalis*. In the US, the product is sold by Novogyne Pharmaceuticals, which is a joint venture between Noven and our US affiliate.

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

Estragest TTS (estradiol & norethisterone acetate transdermal patch) is a low-dose combination estrogen/progestin treatment for symptoms of estrogen deficiency in post-menopausal women as well as for prevention of post-menopausal osteoporosis. *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 an important treatment for bone metabolic diseases, especially for established post-menopausal osteoporosis in women. *Miacalcin/Miacalcic* was first launched as an injection in 1974 and as a nasal spray in 1986. It was later launched as an injection in the US in 1989 and then in 1995 in an intra-nasal form. It contains chemically synthesized salmon calcitonin, a natural compound involved in bone metabolism, including the regulation of calcium levels in the blood. *Miacalcin/Miacalcic* is indicated for use in women with low bone mass more than five years after menopause. As an injection, it is also indicated for the treatment of symptomatic Paget's disease, a chronic condition that causes the growth of abnormal bone, and for the treatment of hypercalcemia, when a rapid decrease in serum calcium is required. It is also indicated to treat bone pain associated with osteolysis and/or osteopenia, as well as neurodystrophic disorders (synonymous with algodystrophy or Sudeck's disease).

Prexige (lumiracoxib) is a selective COX-2 inhibitor in development for the treatment of osteoarthritis and acute pain. It has been approved in over 50 countries to date. *Prexige* is now available in over 25 countries, including 10 countries in Latin America (including Brazil and Mexico) as well as Australia, New Zealand, South Africa, UK, Germany and Canada. Launches in other countries where the product is approved are ongoing. In the EU the mutual recognition procedure was successfully completed in November 2006 and launches in Europe are expected throughout 2007/2008.

Vivelle Dot/Estradot (estradiol transdermal system) is an estrogen-only treatment for symptoms of estrogen deficiency in post-menopausal women and for the prevention of post-menopausal osteoporosis. *Vivelle Dot/Estradot* is the smallest estrogen patch available and offers a thin, flexible and discreet hormone therapy.

Voltaren (diclofenac sodium) is a leading non-steroidal anti-inflammatory drug (NSAID) for the treatment of inflammatory and degenerative forms of rheumatism as well as in the treatment of pain and inflammation. This product, which faces generic competition, has a wide variety of ingestible dosage forms marketed by the Pharmaceuticals Division. In addition, our Consumer Health Division's OTC Business Unit markets a topical therapy offered as *Voltaren Emulgel* in several markets for the treatment of inflammation of tendons, ligaments, muscles and joints, and for certain localized forms of rheumatism.

New Indications in Development

Aclasta/Reclast (zoledronic acid 5 mg; US tradename *Reclast* pending regulatory approval) is under review in the US for the treatment of Paget's disease of the bone. A decision by the FDA on the US tradename and on the use of zoledronic acid 5 mg for the treatment of Paget's disease of the bone

is expected in the first half of 2007, after a second approvable letter was issued for this indication in February 2006. Phase III trials in osteoporosis (including treatment and prevention of post-menopausal osteoporosis, male osteoporosis, corticosteroid-induced osteoporosis, and prevention of recurrent clinical fracture after acute hip fracture) are currently in progress. The pivotal fracture study demonstrated that a single annual, 5 mg infusion of *Aclasta* significantly reduced the incidence of fracture across the most common fracture sites hip, spine and non-spine with sustained effect over the three-year study. Submissions as a once-yearly treatment for osteoporosis in both the US and EU have been completed.

Prexige (lumiracoxib; US tradename pending regulatory approval) is a selective COX-2 inhibitor developed for the treatment of osteoarthritis (OA) and acute pain. In the US, *Prexige* received a non-approvable letter in 2003. Following the successful completion of the TARGET trial in 2004, the FDA confirmed that no additional cardiovascular safety data would be required before resubmission. With additional efficacy clinical studies now being completed, we will resubmit *Prexige* in the US in early 2007, including an alternative tradename for FDA approval.

Compounds in Development

SMC021 (calcitonin) is an oral formulation of salmon calcitonin using the eligen® technology from Emisphere, a novel concept in oral peptide delivery. It is currently in Phase II development for the treatment of osteoporosis and for osteoarthritis.

AIN457 is a novel compound currently in Phase I for the treatment of rheumatoid arthritis.

ACZ885 is a human monoclonal antibody directed against human IL-1-beta that is in Phase II development for the treatment of Muckle Wells Syndrome and rheumatoid arthritis and in Phase I for Juvenile Rheumatoid Arthritis.

Prexige for the indications dyspepsia, osteoporosis and rheumatoid arthritis are on hold. Activities for the development of new formulations with *Prexige* are under discussion.

AAE581 has been terminated.

Principal Markets

The Pharmaceuticals Division has a commercial presence in approximately 140 countries worldwide, but net sales are generally concentrated in the US, Europe and Japan, which together accounted for 84% of 2006 net sales. The following table sets forth certain data relating to our principal markets in the Pharmaceuticals Division.

Pharmaceuticals	**Net Sales 2006**	
	($ millions)	**(%)**
United States	9,472	42
Americas (except the United States)	1,775	8
Europe	7,332	33
Japan	2,090	9
Rest of the World	1,907	8
Total	**22,576**	**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. Net sales of the vast majority of our products are not subject to material changes in seasonal demand.

Production

The primary goal of our manufacturing and supply chain management program is ensuring the uninterrupted, timely and cost-effective supply of products that meet all product specifications. To achieve this objective, we manufacture our products at five bulk chemical and 15 pharmaceutical production facilities as well as two biotechnology sites. Bulk chemical production involves the manufacture of therapeutically active compounds, mainly by chemical synthesis or by a biological process such as fermentation. Pharmaceutical production involves the manufacture of "galenical" forms of pharmaceutical 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 pharmaceutical production facilities are located in Stein, Switzerland; Wehr, Germany; Torre, Italy; Barbera, Spain; Suffern, New York; Sasayama, Japan and in various other locations in Europe, including France, the UK and Turkey. Our two biotechnology plants are in Switzerland and France.

During clinical trials, which can last several years, the manufacturing process for a particular product 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. We have implemented a global manufacturing strategy to maximize business continuity.

Raw materials for the manufacturing process are either produced in-house or 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.

Marketing and Sales

The Pharmaceuticals Division serves customers with approximately 7,000 field force representatives in the US (including supervisors), and an additional 14,700 in the rest of the world. These trained representatives, where permitted by law, present the economic and therapeutic benefits of our products to physicians, pharmacists, hospitals, insurance groups and managed care organizations.

Although specific distribution patterns vary by country, Novartis generally sells its prescription drugs primarily to wholesale and retail drug distributors, hospitals, clinics, government agencies and managed healthcare providers.

In the US, certain products are advertised by way of television, newspaper and magazine advertising. Novartis also pursues co-promotion/co-marketing opportunities as well as licensing and distribution agreements with other companies when economically attractive.

Competition

The global pharmaceutical market is highly competitive and we compete against other major international corporations with substantial financial and other resources, which sell branded prescription pharmaceutical products. Competition within the 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.

As is the case with other pharmaceutical companies selling patented pharmaceuticals, Novartis faces an increasing challenge from companies selling generic forms of our products following the expiry of patent protection. Generic companies may also gain entry to the market through successfully challenging our patents, but we vigorously defend our intellectual property rights from generic challenges that infringe upon our patents and trademarks. We also face competition from over-the-counter (OTC) products that do not require a prescription from a physician.

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 2006, we invested approximately $4.3 billion in Pharmaceuticals Division research and development, which represented 18.9% of the Division's total net sales. Our Pharmaceuticals Division invested $4.0 billion and $3.5 billion on research and development in 2005 and 2004 respectively. There are currently 138 projects in clinical development.

We have long term research commitments totaling $2.8 billion as of December 31, 2006, including $2.7 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. 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 " Development program."

In 2003, we established the Novartis Institutes for BioMedical Research (NIBR), headquartered in Cambridge, Massachusetts, with affiliates worldwide. 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 make drug discovery more relevant and predictable in order to provide new and better medicines for patients worldwide.

Our Cambridge facility contains a total of 100,000 square meters of laboratory and office space. The facilities house more than 800 scientists and technology experts, and approximately 1,200 associates in total.

Several of our discovery research platforms, including Genome and Proteome Sciences, Developmental and Molecular Pathways, Models of Disease, Global Discovery Chemistry, and Epigenetics, are based at our Cambridge headquarters. Disease-area research groups in Cambridge include cardiovascular disease, diabetes and metabolism, infectious disease, oncology and ophthalmology.

Outside of the Cambridge site, an additional 2,300 scientists and technology experts conduct research in Switzerland, Austria, the UK, Japan and two other US sites. Research is conducted in the areas of neuroscience, autoimmune disease, oncology, cardiovascular disease and respiratory disease at these sites.

In addition, research platforms such as Discovery Technologies are headquartered in the NIBR site in Basel.

In November 2006 it was announced that a new R&D center will be built in Shanghai, China. Initially, scientists will work in a 5,000 square meter start-up facility that is expected to open in May 2007. Construction of a 40,000 sq. ft. permanent facility will begin in July 2007. The new R&D center will focus on discovering and developing innovative therapies to treat diseases with high unmet medical need in Asia. Its initial focus will be on virally induced cancer and infectious diseases such as liver cancer caused by hepatitis B.

Development program

The focus of our Development program is to determine whether new drugs are safe and effective in humans. 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 research and development processes

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 pharmaceutical and biotechnology companies, and with academic institutions in order to develop new products, acquire platform technologies and access new markets. We license products that complement our current product line and 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 we are considering 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, manufacturing, labeling and approval for marketing of pharmaceutical products intended for commercialization in the US. The FDA continues to monitor the safety of pharmaceutical products after they have been approved for marketing in 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. Throughout the life cycle of a products, the FDA also requires compliance with standards relating to good laboratory, clinical and manufacturing practices.

Once an NDA is submitted, the FDA assigns reviewers from its biopharmaceutics, chemistry, clinical microbiology, pharmacology/toxicology, and statistics staff. After a complete review, these content experts

then provide written evaluations of the NDA. These recommendations are consolidated and are used by the Senior FDA staff in its final evaluation of the NDA. Based on that final evaluation, FDA then provides to the NDA's sponsor an approval, or an approvable, or non-approvable letter. If not approved, 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.

European Union

In the EU, there are three main procedures for application for authorization to market pharmaceutical products in the EU Member States, the Centralized Procedure, the Mutual Recognition Procedure and the decentralized 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 Medicines Agency (EMEA) for an authorization which is valid for the European Community. The Centralized Procedure is mandatory for all biotechnology products and for new chemical entities in cancer, neurodegenerative disorders, diabetes and AIDS, and optional for other new chemical entities 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 CHMP) to provide the requested additional information. On day 210, the CHMP 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 60 days after a positive CHMP recommendation.

Under the Mutual Recognition Procedure (MRP), the company first obtains a marketing authorization from a single EU member state, called the reference Member State. In the decentralized procedure the application is done simultaneously in selected or all Member States. Subsequently, the company may seek mutual recognition of this first authorization/assessment 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 national marketing authorization 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 Agency (PMDA). Once an NDA is submitted, a review team is formed consisting of specialized officials of

PMDA, e.g. chemistry/manufacturing, non-clinical, clinical and biostatistics. While a team evaluation is carried out, a data reliability survey and Good Clinical Practice inspection are carried out by Office of Conformity Audit of the PMDA in parallel. Team evaluation results are passed to PMDA's external experts who then report back to the PMDA. 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 Council on Drugs and Foods Sanitation (CDFS) which then advises the MHLW on final approvability. Marketing/distribution approvals require a review to determine whether or not the product in the application is suitable as a drug to be manufactured and distributed by a person who has obtained a manufacturing/distribution business license for the type of drug concerned and confirmation that the product has been manufactured in a plant compliant with GMP.

Once the MHLW has approved the application and has listed its national health insurance price, the company can make the new drug available for physicians to prescribe and obtain reimbursement. 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 periodic safety update reports. Within three months from the specified re-examination period, which is designated at the time of the approval of the application for the new product, the company must submit a re-examination application to be reassessed its safety and efficacy against approved labeling by PMDA.

Price Controls

In most of the markets where we operate, the prices of pharmaceutical products are subject to both direct and indirect price controls 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.

Direct efforts to control prices.

United States. In the US, as a result of the recent Democratic takeover of both houses of Congress, there is a significant risk that the Medicare reform legislation which went into effect in January 2006 will be amended to enable the US government to use its enormous purchasing power to demand additional discounts from pharmaceutical companies.

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. 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. Increasingly high barriers are being erected against the entry of new products. In addition, prices for marketed products are referenced within Member States and across Member State borders, including new EU Member States.

Japan. In Japan, the government generally introduces price cut rounds every other year, during which the government mandates price decreases for specific products. In 2005, the National Health Insurance price calculation method for new products and price revision rule for existing products were reviewed, and the resulting new drug tariffs were effective beginning April 2006. The Japanese government is currently undertaking a healthcare reform initiative with a goal of curbing national medical expenditures, and is continuing its review of the pricing methods used.

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. Other countries have similar laws. We expect that the pressure for generic substitution will continue to increase as a result of the implementation of the Medicare prescription drug benefit which took effect in 2006.

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. 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 and other developed countries into the US are currently illegal. However, there are ongoing political efforts at the federal, state and local levels to change the legal status of such imports, and we expect those pressures to intensify in 2007 as a result of the Democratic takeover of Congress.

We expect that pressures on pricing will continue worldwide, and may increase. Because of these pressures, there can be no certainty that in every instance we will be able to charge prices for a product that, in a particular country or in the aggregate, enable us to earn an adequate return on our investment in that product.

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 July 2015 in the US (also including pediatric extension), until 2016 in the major EU countries, and until 2014 in Japan.

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

Diovan/Co-Diovan/Diovan HCT. The active ingredient in *Diovan/Co-Diovan/Diovan HCT*(valsartan) is covered by a compound patent through 2012 in the US, and through 2011-13 in other markets. In the US additional patents covering the marketed formulation have been challenged. However, we have not filed suit at this point in time.

Lotrel is a combination of benazepril hydrochloride and amlodipine besylate. Patent protection for the benazepril substance has expired in the US. Patent protection for the amlodipine besylate substance will expire in the US in March 2007. In addition to these patents, *Lotrel* is protected by a

combination patent in the US until 2017. Generic manufacturers have challenged this patent, and Novartis has sued them. Our actions against two of these manufacturers are currently stayed.

Lamisil. The active ingredient in *Lamisil* is covered by a compound patent family which expires in June 2007 in the US; in August 2007 in France; and has expired elsewhere. The US patent had been challenged by a generic manufacturer in the US. The generic manufacturer has since withdrawn its suit and conceded that this patent is valid and enforceable.

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, Canada and elsewhere. Patent infringement actions are pending against manufacturers of some of these generic products. At present, there are no injunctions in place against any of the manufacturers that we have sued.

Sandostatin. Basic patent protection for the active ingredient of *Sandostatin SC* has expired in the US, Japan, Germany, France and the UK, and it will expire in May 2007 in Italy. Generic versions of *Sandostatin SC* have been approved in the US and elsewhere. Patent protection for the *Sandostatin LAR* formulation extending to 2010 (and 2013 and beyond in the US) continues in major markets. *Sandostatin LAR* is a long-acting version of *Sandostatin* which represents a majority of our sales in this product family.

Trileptal. Patent protection for *Trileptal*'s active ingredient has expired in major countries. However, a patent has been granted in the US directed to a method of treating seizures with our marketed formulations of *Trileptal*, which will expire in 2018, and corresponding patent filings are granted or pending in other major countries with the same expiration date. A number of parties have filed applications to market a generic version of *Trileptal* in the US. Of these, lawsuits have recently been initiated against certain of the generic manufacturers. In Europe, the corresponding granted patent is currently being opposed by certain other generic manufacturers.

Femara. The active ingredient in *Femara* is covered by a compound patent which expires in 2011 in the US. A generic manufacturer has challenged this patent and has filed an application for a generic version of *Femara* in the US. Novartis has filed a lawsuit against the generic manufacturer for patent infringement.

Voltaren. *Voltaren* is off-patent. As a result, revenue from *Voltaren* has declined, and may decline significantly further in the future.

Exelon. The active ingredient in *Exelon* is covered by a compound patent (granted to Proterra and licensed to us), which expires in the US in 2012 (as a result of a patent term extension), and which expires in 2011-13 in other major markets. In addition, we hold an isomer patent on *Exelon* which expires in 2012-14. Three generic manufacturers have filed applications to market a generic version of *Exelon* in the US. Together with Proterra, we have sued all three parties for patent infringement.

Visudyne. Basic patent protection for the active ingredient in *Visudyne* expires in 2011 in the US and in 2014 in other major countries. An academic institution has obtained granted patents for a method of use involving photodynamic therapy and subsequently filed a patent infringement suit against us and our licensor, QLT Phototherapeutics.

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 most other countries. One generic manufacturer has applied to the FDA for the right to sell a generic version of *Miacalcin* in the US using the Novartis formulation. We have sued that manufacturer for patent infringement. Two other companies have applied to the FDA for the right to sell a generic version of *Miacalcin* in the US based on a different formulation. We have not sued these companies. Another company's recombinant salmon calcitonin product is approved in the US, but would not be automatically substitutable in the US for

Miacalcin.

Foradil. Patent protection for *Foradil*'s active ingredient has expired in major countries. As a result, revenue from *Foradil* has declined, and may decline significantly further in the future.

Focalin. The specific formulation of *Focalin* is covered by patents (granted to Celgene and licensed to us) through 2015 in the US and 2018 in other markets. A generic manufacturer has challenged these patents and has filed an application for a generic version of *Focalin* in the US. Together with Celgene, we have sued the generic manufacturer for patent infringement.

Famvir. The active ingredient in *Famvir* is covered by a compound patent which expires in 2010 in the US, in 2008 in Europe and 2006 in Canada. Other method of use patents expire in 2014 and 2015. One generic manufacturer has challenged these patents in the US and has filed an application for a generic version of *Famvir* in the US. We have sued that manufacturer in the US for infringement of the compound patent.

Starlix. The active ingredient in *Starlix* is covered by Ajinomoto patents. The basic US patent will expire in 2009. In the US, additional patents covering the marketed formulation have been challenged by several companies seeking to market a generic version of *Starlix*. In Europe basic compound protection exists in Germany, France, the UK and Switzerland and will expire in 2011.

Ritalin LA. Compound patent protection for the active ingredient of *Ritalin LA* has expired. The specific formulation of *Ritalin LA* is covered by patents (granted to Celgene and Elan and licensed to us) through 2018 in the US. A generic manufacturer has challenged these patents and has filed an application for a generic version of *Ritalin LA* in the US. Together with Celgene, we have sued for patent infringement.

In addition, see "Item 4. Information on the Company 4.B Business Overview Consumer Health Intellectual Property" for a description of patent litigation involving the Ciba Vision Business Unit of our Consumer Health Division.

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.

VACCINES AND DIAGNOSTICS

Our Vaccines and Diagnostics (V&D) Division is a leader in the research, development, manufacturing and marketing of vaccines and blood testing equipment. The business of the division is conducted by approximately 20 affiliated companies throughout the world. As of December 31, 2006, the V&D Division employed 3,935 associates worldwide. As of May 2006, financial results of the Division were consolidated into Novartis and achieved net sales of $956 million for the eight-month period, representing 3% of the Group's total sales.

Vaccines and Diagnostics is a new Division of Novartis formed following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis in April 2006. The Division has two activities: Novartis Vaccines and Chiron. Novartis Vaccines is the world's fifth-largest vaccines manufacturer and the second-largest supplier of influenza vaccines in the US. Our vaccine products include meningococcal, pediatric and travel vaccines. Chiron is dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools.

In May 2006, the US government offered key support to V&D for the new technology when the Dept. of Health and Human Services (HHS) awarded us a grant of up to $220 million to support development and manufacturing of a cell culture-derived influenza vaccine in the US. The grant is part of a larger HHS initiative to expand domestic infrastructure for influenza vaccines, as well as ensure domestic capacity to produce 600 million doses of pandemic influenza vaccine within six months of a

pandemic declaration. The new Novartis facility would represent up to 150 million doses of that capacity. Part of the HHS grant will support the planning and equipment for the new cell culture- based influenza vaccines manufacturing plant in Holly Springs, North Carolina.

In June 2006, the Division entered into an agreement with Intercell AG to acquire marketing and distribution rights of IC51, a Phase III vaccine for the prevention of Japanese Encephalitis virus infections. Novartis has the rights to IC51 in the US, Europe and certain markets in Asia and Latin America.

In addition, we were awarded a one-time tender from the United Kingdom for pre-pandemic H5N1 vaccines. We also submitted a regulatory file to the European Medicines Agency for Marketing Authorization of our novel flu cell-culture based influenza vaccine.

In July 2006, Chiron signed a multi-year agreement with the American Red Cross for the supply for Nucleic Acid Testing products to the American Red Cross.

In August 2006, we announced delivery and release of the first shipments of the *Fluvirin* influenza virus vaccine to the US for the 2006-2007 influenza season. *Fluvirin* was the first injectable influenza vaccine shipped to the US market in 2006.

In September 2006, V&D, together with Crucell N.V., received World Health Organization (WHO) pre-qualification for its fully liquid pentavalent vaccine *Quinvaxem*, combining antigens for protection against five important childhood diseases: diphtheria, tetanus, pertussis (whooping cough), hepatitis B and Haemophilus influenzae type b, one of the leading causes of bacterial meningitis in children. It is the first internationally available fully-liquid vaccine containing all five of the above antigens to reach the market. The WHO prequalification was a final prerequisite for the combination vaccine to be made available to supranational purchasing organizations.

In November 2006, the HHS awarded V&D a contract valued at more than $41 million to supply the US government with bulk H5N1 pre-pandemic influenza vaccine against the H5N1 avian influenza strain contributing to the US National Strategic Stockpile of pre-pandemic vaccine. We also submitted a file to the European Medicines Agency for an adjuvanted H5N1 pre-pandemic vaccine.

In 2006, V&D net sales, for the eight months since its formation, increased by 42% compared to the same period in 2005 reported by Chiron. The business year was characterized by double digit growth in both vaccines and diagnostics, with the return of full scale seasonal influenza vaccine production, one-time government contracts for stockpiling of H5N1 pre-pandemic vaccines and geographic expansion of the diagnostics' nucleic acid blood testing products in Europe as well as the rollout of West Nile Virus tests.

Since our acquisition of Chiron Corporation in April, we continue to focus our efforts on restructuring the business and creating greater focus in our research and development efforts. In vaccines, our focus is on developing a reliable supply of innovative products in influenza, meningitis and other areas where medical needs for preventive treatments remain. For our manufacturing sites, we continue the integration of the key sites into one global network as well as implementing Novartis quality standards. Our goal is to provide access to life-saving preventive medicines that help protect the lives of people worldwide through leadership, innovation and cutting edge science. We are evaluating the options to grow and transform diagnostics from its current base into a molecular diagnostics unit.

Key marketed products

The following table describes the key marketed products for V&D. Not all products are available in all markets. Through its joint business with Ortho-Clinical Diagnostics, Chiron develops and markets a line of immunoassay screening, diagnostic, and supplemental hepatitis and retrovirus tests.

Product	**Indication**
Influenza Vaccines	**Indications**
Agrippal	Highly purified influenza vaccine for adults and children above six months
Begrivac	A preservative free influenza vaccine for adults and children above six months
Fluad	Influenza immunization for the elderly, especially for patients with chronic conditions like diabetes or cardiovascular or respiratory diseases
Fluvirin	A purified surface antigen influenza vaccine for adults and children four years of age and older
Meningococcal Vaccines	**Indications**
Menjugate	Meningococcal C vaccine that provides protection and immunologic memory starting from 2 months of age
MeNZB	Geography-specific Meningococcal B Vaccine available in New Zealand
Travel Vaccines	**Indication**
Encepur Children *Encepur Adults*	Vaccine proven to be highly effective in protecting against tick-borne encephalitis (TBE). Also known as spring-summer encephalitis, TBE is a viral infection of the central nervous system transmitted by bites of certain kinds of infected ticks
Rabipur/RabAvert	Effective pre-exposure and post-exposure prophylaxis treatment against rabies
Typhoral L	Oral typhoid vaccine
HAVpur	Inactivated Hepatitis A vaccine
Pediatric Vaccines	**Indication**
IPV-Virelon	Active immunization against poliomyelitis for individuals aged 2 months and over
Polioral	Live, attenuated, oral poliomyelitis vaccine (Sabin) containing attenuated poliomyelitis virus types 1, 2 and 3
TD-Virelon	Tetanus Diphtheria
Dif-Tet-All	Tetanus Diphtheria

Adsorbed Diphtheria Vaccine Behring for children	Diphtheria
Vaxem Hib	Active immunization against invasive illnesses caused by H. influenza type b, such as meningitis, pneumonia and epiglottitis
Quinvaxem	Fully-liquid pentavalent vaccine combining antigens for protection against five childhood diseases: diphtheria, tetanus, pertussis (whooping cough), hepatitis B and Haemophilus influenzae type b

Adult Vaccines	Indication
Tetanol pur	Tetanus
Tetanol	Tetanus
Adsorbed Diphtheria Vaccine Behring for adults	Diphtheria
Td-pur	Tetanus Diphtheria
Td-Virelon	Tetanus Diphtheria Polio
Dif-Tet-All adult use	Tetanus Diphtheria

Blood testing	Indication
PROCLEIX WNV Assay	Provides blood centers with a powerful combination for blood screening with unique NAT technology
PROCLEIX HIV-1/HCV Assay	Provides blood centers with a powerful combination for blood screening with unique NAT technology
PROCLEIX ULTRIO Assay	Designed to detect HIV-1, HCV and HBV simultaneously in a single tube (HBV screening under further regulatory review in the US)
PROCLEIX System	semi-automated instrument solutions supporting NAT assay test
PROCLEIX TIGRIS System	fully automated instrument solutions supporting NAT assay test
PROCLEIX CPT Pooling Software	Software optimize the screen performance of PROCLEIX instruments
PROCLEIX NAT TRACKER	Software optimize the screen performance of PROCLEIX instruments

Products in Development

Vaccines

Therapeutic area	Project/Compound	Potential Indication/Disease Area	Planned filing dates/Current phase
Influenza	*Optaflu*	Flu Cell culture based trivalent seasonal influenza vaccine	EU submitted; US > 2008/Phase II
	Agrippal	Egg-based trivalent seasonal influenza vaccine	EU registered; US Q4 2007
	Fluad	Adjuvanted egg-based seasonal influenza vaccine	EU registered; US 2008
	H5N1 vaccine	Adjuvanted egg-based H5N1 vaccine	EU submitted US Phase II
Meningitis	*MenACWY*	Quadrivalent meningitis vaccine	> 2008/Phase III

	MenB	Recombinant meningitis B vaccine	> 2008/Phase II
HCV		Therapeutic HCV vaccine	Phase I
		Prophylactic HCV vaccine	Phase I

Diagnostics

Therapeutic area	Project/Compound	Potential Indication/Disease Area	Planned filing dates/Current phase
Blood Testing	vCJD Assay	enhanced immunoassay to detect abnormal protein particles in blood and blood products that cause variant Creuzfeldt-Jakob Disease (vCJD), or mad cow disease	TBD
	Enzymatic Conversion System	enzymatic conversion system to convert A, B and AB red blood cells to enzyme-converted group O RBCs, which are being developed to be transfused to all individuals, regardless of blood type, without transfusion reaction	> 2008
	PROCLEIX TIGRIS System.	Fully automated instrument solution supporting NAT assay tests	EU registered, US submitted
	PROCLEIX ULTRIO Assay	NAT assay designed to detect HIV-1, HCV and HBV through single testing process	US submitted, EU registered (CE mark)

Prinicipal Markets

The principal markets for V&D include the US and Europe. Sales to countries without V&D affiliated offices are also credited through the local organizations of production origin.

Vaccines and Diagnostics	Net Sales 2006 (Since April 20, 2006 acquisition date)	
	($ millions)	(%)
United States	462	48
Americas (except the United States)	13	1
Europe	381	40
Rest of the World	100	11
Total	956	100

Sales of certain vaccines, including influenza and tick borne encephalitis vaccines are subject to seasonal variation.

Production

We manufacture our vaccines products at four facilities in Europe and Asia. Our principal production facilities are located in Liverpool, UK; Marburg, Germany; Siena and Rosia, Italy; and Ankleshwar, India. We continue to invest and upgrade these sites to ensure that previously initiated remediation efforts are completed and meet Novartis standards. In addition, certain conjugation and chemistry activities for vaccines are performed at our Emeryville, California site. V&D's predecessor, Chiron, has experienced supply interruptions in the past, and there can be no assurance that supply will not be interrupted again in

the future as a result of unforeseen events. The manufacture of our products is heavily regulated, making supply never an absolute certainty. If we or our suppliers fail to comply fully with such regulations then there could be a recall or government-enforced shutdown of production facilities, as experienced by Chiron in 2004, which in turn could lead to product shortages.

During clinical trials, which can last several years, the manufacturing process for a particular product 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.

Raw materials for the manufacturing process are either produced in-house or 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.

Each year new influenza vaccines need to be produced in order to confer effective protection against the current circulating strains of the virus, which can change from year to year. Global surveillance of influenza viruses is conducted throughout the year by the WHO Influenza Surveillance Network, which provides us with information on currently circulating strains and identifies the appropriate strains to be included in next season's influenza vaccine. Each year, the European Medicines Agency and the US Centers for Disease Control then confirm the vaccine composition for the coming season for the northern hemisphere and the Australian Therapeutic Goods Administration for the southern hemisphere.

Marketing and Sales

Our vaccine marketing and sales organizations are based in Germany, United Kingdom, Italy and the United States. We are also expanding operations in China and India. Novartis Vaccines sells products from multiple therapeutic areas including influenza, meningococcal, travel, pediatric and adult vaccines. Not all products are available in all markets but overall a significant percentage of sales are derived from vaccines for influenza and tick-born encephalitis. In the United States, we market influenza and rabies vaccines through a network of wholesalers and distributors. Direct sales efforts are focused on public health, distributor channels, and non-traditional channels, e.g., employers, chain drug headquarters and service providers. The United States sales and marketing offices are located in Philadelphia, Pennsylvania but will be relocating to Cambridge, Massachusetts during 2007.

Novartis is dedicated to preventing the spread of infectious diseases through the development of novel blood screening tools. Novartis is an established player in the worldwide blood bank industry and markets instrument systems and specific tests which screen donated blood for such viruses as HIV and HCV through direct detection of viral RNA or DNA. The company's commercial focus is exclusively on blood banks worldwide where there is significant competition especially from established players in the diagnostic market and various in-house efforts to develop assays for local blood screening. With roughly half of world wide blood donations not being subjected to state of the art viral nucleic acid screening a large part of the company's marketing efforts will be directed toward increasing the practice of viral nucleic acid screening using its proprietary systems in emerging areas of the world. Novartis will continue to differentiate itself in the blood screening market through the continued adoption of increasingly automated systems and by the development of additional tests designed to increase further the safely of donated blood worldwide.

Competition

The global market for products of the type sold by our Vaccines and Diagnostics Division is highly competitive, and we compete against other major international corporations with substantial financial and other resources. Competition within the 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.

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

Our goal in the Vaccines and Diagnostics Division is to provide access to life-saving preventive medicines that help protect the lives of people worldwide. To discover and develop new and novel vaccines, intensive research, technical and development work is required in order to assess a compound's potential, as well as immunogenicity and safety. While research and development costs for vaccines traditionally were not as high as for pharmaceuticals, a robust clinical program including Phase I to Phase III must be performed by the manufacturer to obtain a license for commercialization.

In vaccines, we have developed a strong pipeline focused on four core areas: influenza, meningitis, pediatric and travel vaccines.

Similarly, in blood testing, robust clinical programs are required to assess and validate the assays before a commercial license is granted by regulatory authorities.

In 2006, the Vaccines and Diagnostics Division invested $148 million in research and development, which amounted to 15.5% of net sales. We had long-term research commitments totaling $16 million, in the aggregate as of December 31, 2006. We intend to fund these expenditures from internally generated resources.

Regulation

Our vaccines products are subject to essentially the same regulatory procedures as are the products of our Pharmaceuticals Division. See "Pharmaceuticals Regulation." In the US, a company seeking approval of a vaccine submits a Biologics License Application ("BLA") for the vaccine, rather than an NDA. Subsequently, the BLA follows substantially the same path for approval as does an NDA. In addition, new registrations for seasonal flu vaccines must be validated and submitted every year, based on the influenza strains provided by WHO and the Centers for Disease Control needed for the growth of the vaccine.

Diagnostics products are regulated as medical devices in the US and the EU. 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, safety and effectiveness information for Class II and III devices must be reviewed by the FDA. There are two review procedures: a Pre-Market Approval (PMA) and a Pre-Market Notification (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. Under Pre-Market Notification (510(k)), the manufacturer submits notification to the FDA that it intends to commence marketing the product, with data that establishes the product as substantially equivalent to another product already on the market. The FDA has 90 days to review and clear a 510(k) submission. For specific diagnostics products that are sold into blood banks, or sold for diagnosis of HIV-1 infection, applications are submitted for review by the CBER branch of FDA. Under such review, the product is considered a biologic until such time as approval is received, at which time the product becomes a medical device. For products used specifically for screening of blood donors, or biologic reagents sold for further manufacturing use, the medical device is subject to Licensure (as opposed to "approval" by the CBER division). The submission for this purpose follows the same requirements as Vaccines; a Biologic License Application is submitted to CBER. CBER has 240 days to review a BLA.

In the EU, the CE marking is required for all medical devices sold. By affixing the CE marking, the manufacturer certifies that a product is in compliance with provisions of the EU's Medical Device

Directive. Within the IVD Directive for use in the EU, products listed into Annex II, List A or B are subject to review and prior approval by a Notified Body. All other products not listed in this Annex are subject to Self-Certification by the manufacturer, a process that requires confirmation of performance to appropriate standards resulting in a Declaration of Conformity and notification to appropriate Competent Authorities in the EU indicating intent to market the product. For this purpose, Novartis Vaccines & Diagnostics maintains a full Quality Assurance system and is subject to routine auditing by a certified third party ("Notified Body") to ensure that this quality system is in compliance with the requirements of the EU's Medical Device Directive as well as the requirements of the ISO quality systems' standard ISO 13485.

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.

SANDOZ

Our Sandoz Division is a world leader in the development, manufacturing and marketing of pharmaceutical products and substances that are no longer protected by patents. The business of Sandoz is conducted by affiliated companies in 110 countries. Sandoz was a business unit of our Consumer Health Division and became a separate division on January 1, 2005. As of December 31, 2006, the affiliates of the Sandoz Division employed 21,117 associates worldwide. In 2006, the Sandoz Division achieved consolidated net sales of $6 billion, which represented 16% of the Group's total net sales.

Sandoz maintains a Retail Generics activity and an Anti-Infectives activity. In Retail Generics, we develop and manufacture active ingredients and finished dosage forms that are no longer protected by patents. Retail Generics includes the development and manufacture of biopharmaceuticals. Retail Generics also supplies certain active ingredients to third parties. In Anti-Infectives, we develop and manufacture off-patent active pharmaceutical ingredients and intermediates mainly antibiotics for internal use in Retail Generics and for sale to third-party customers. Sandoz is one of the leading manufacturers of antibiotics in Europe.

In July 2006, we signed an exclusive collaboration agreement with Momenta Pharmaceuticals, Inc., a biotechnology company specializing in the characterization and engineering of complex pharmaceuticals, to develop complex generics and follow-on biotechnology pharmaceuticals. As part of the arrangement, Sandoz purchased approximately 4.7 million shares of Momenta common stock for an aggregate price of $75 million. Sandoz and Momenta plan to jointly develop, manufacture and commercialize four drug candidates in the collaboration. The two companies will share profits from the sales of all four products under separate arrangements for each project. In addition, both companies have agreed to routinely review other complex generic and follow-on product candidates for inclusion in the collaboration. Momenta is eligible to receive milestone payments.

In 2005, we acquired two leading generic pharmaceutical companies Hexal AG and Eon Labs, Inc., the integration of which into Sandoz is now largely completed. The two companies were acquired for approximately $8 billion in all-cash transactions, joining three premier generics enterprises that combine

the Sandoz global geographic presence and expertise in Retail Generics and Anti-Infectives, Hexal's leadership in Germany and strong track record of successful product development, and Eon Labs' strong position in the US for "difficult-to-make" generics. The acquisition of Hexal was completed in June 2005, while the purchase of 100% of Eon Labs was completed in July 2005. With these acquisitions, Sandoz has a portfolio of more than 840 compounds in more than 5,000 dosage forms. Annual cost synergies totaling $200 million are anticipated within three years from closing, with 50% expected to be achieved in the first 18 months.

In August 2004, we acquired Sabex Holdings Ltd., a Canadian generics company with a leading position in injectable products. This acquisition provided Sandoz with strong growth opportunities in injectable generics. It also gave Sandoz an operational presence in Canada, the world's sixth largest generics market, and offered the opportunity to increase sales in Canada of our existing portfolio of solid dosage form products.

In June 2004, we acquired the Danish generics company Durascan A/S from AstraZeneca plc. This acquisition provided Sandoz with a leadership position in the Danish market. In addition, Durascan's broad portfolio of generic products offered growth opportunities for Sandoz throughout the Nordic region.

In 2006, Sandoz total net sales advanced by 27% thanks to strengthening positions in fast-growing generics markets, especially in Europe, as well as successful new product launches, many of which are difficult-to-make products. Also supporting growth were the Hexal and Eon Labs acquisitions in 2005.

Anti-Infectives continued to strengthen its leading position in the field of penicillins (like the combination amoxicillin/clavulanic acid) and cefalosporin intermediates and active pharmaceutical ingredients sold to industrial customers. Despite an ongoing competitive environment, Anti-Infectives achieved solidly positive results, strongly supported by major initiatives including key customer management and programs designed to reduce manufacturing costs. With the internal supply of active pharmaceutical ingredients, Anti-Infectives strongly supports the Sandoz antibiotics Retail Generics activities.

In biopharmaceuticals, we continued our efforts to develop and manufacture these follow-on protein products. We have more than 20 years of biotech experience in the development and manufacture of biotechnology products for third parties. We intend to leverage that experience and technology to develop, manufacture and market high-quality biopharmaceutical products such as protein hormones and other human proteins, and to sell them as substitutes for branded ones after their patents have expired. With our emerging follow on biopharmaceuticals portfolio, we are taking a leadership role in the debate over appropriate regulatory policies for follow-on biologics in Europe and the US. We are determined to contribute to the availability of safe and effective biopharmaceuticals. Sandoz has demonstrated its leading position in the field of follow-on biologics by being the first company to have such products approved in the US, Europe, and Australia.

Our recombinant human growth hormone *Omnitrope*, a biopharmaceutical product we developed, received marketing authorization in Australia in September 2004 and was launched there in November 2005. In April 2006, the European Commission granted Marketing Authorization for *Omnitrope* and the product was launched in the same month in Germany, followed in November by the UK and the Netherlands in December. In the US, we received regulatory approval for *Omnitrope* in May 2006. We are now preparing to launch *Omnitrope* in the US.

Recently Launched Products

The following is a summary of the most important products launched by Sandoz in 2006:

Omnitrope (a generic version of Somatropin®), a recombinant human growth hormone, was launched in Germany in April, in the UK in November and in the Netherlands in December 2006.

Metronidazole V Gel (a generic version of Flagyl®), a treatment for certain vaginal and urinary tract infections in men and women, was launched in the US in November 2006.

Metropolol Succinate ER (a generic version of Toprol-XL®), a treatment for high blood pressure was launched in the US in December 2006.

Ondansetron Hydrochloride Injection (a generic version of Zofran®), used for the prevention of nausea and vomiting caused by radiation therapy and chemotherapy for cancer, was launched in the US in November 2006; Ondansetron Tablets were launched in December 2006.

Clarithromycin ER (a generic version of Biaxin®), an antibiotic, was launched in the US in December 2006.

Simvastatin (a generic version of Zocor®), a cholesterol-lowering treatment, was launched in the US in December 2006.

Key Marketed Products

The following tables describe the key marketed products for Sandoz. Not all products are available in all markets.

Retail Generics

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
Metoprolol	Lopressor®	Anti-hypertension
Fentanyl	Duragesic®	Analgesic
Simvastatin	Zocor®	Cholesterol lowering treatment
Azithromycin	Zithromax®	Anti-infective

Anti-Infectives

Active Ingredients	Description
Oral and sterile penicillins	Anti-infectives
Oral and sterile cefalosporins	Anti-infectives
Clavulanic acid and mixtures with clavulanic acid	ß-lactam inhibitors
Classical and semisynthetic erythromycins	Anti-infectives
Tiamuline	Anti-infectives
Lovastatin, Simvastatin, Pravastatin	Statins
Vancomycin	Anti-infectives
Thyroxine	Hormones

Intermediates	Description
Various cephalosporin intermediates	Anti-infectives
Erythromycin base	Anti-infectives
Various crude compounds produced by fermentation	Cyclosporine, ascomysine, rapamycine, mycophenolic acid, etc.

Principal Markets

The principal markets for Sandoz are the two largest generics markets in the world: the US and Europe. The following table sets forth the aggregate 2006 net sales of Sandoz by region:

Sandoz	Net Sales 2006	
	($ millions)	(%)
United States	1,548	26
Americas (except the United States)	376	6
Europe	3,430	58
Rest of the World	605	10
Total	**5,959**	**100**

Many Sandoz products are used for chronic conditions that require patients to consume the product over long periods of time, from months to years. Sales of our anti-infective products are subject to seasonal variation. Sales of the vast majority of our other products are not subject to material changes in seasonal demand.

Production

We manufacture our Sandoz products at 44 production facilities around the world. Among these, our principal production facilities are located in Barleben and Radebeul, Germany; Kundl, Austria; Menges and Ljubljana, Slovenia; Broomfield, Colorado; Wilson, North Carolina; Stryków, Poland; Kalwe, India; Boucherville, Canada; Cambé, Brazil; and Gebze, Turkey. In addition, during 2006, the former Pharmaceuticals Division production facility located at Taboão da Serra, Brazil was transferred to the Sandoz Division. Transfer of operations at this facility is in process. While we have not experienced material supply interruptions in the past, we were faced in 2006 with stock outs which lead to lost sales. No

assurance can be made that supply will not be interrupted again 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 this could result in a recall or a government-enforced shutdown of production facilities, which in turn could lead to product shortages.

Active pharmaceutical ingredients are manufactured in our own facilities or purchased from third-party suppliers. We maintain state-of-the-art and cost-competitive processes within our own production network. Those processes include fermentation, chemical syntheses and precipitation processes, such as sterile processing. Many follow-on biologics are manufactured using recombinant DNA derived technology by which a gene is introduced into a host cell which will produce the human protein. This manufacturing process requires sophisticated technical expertise. We are constantly working to improve current and develop new manufacturing processes.

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, and competitive material sourcing can be assured. However, our ability to do so may at times be limited by regulatory requirements. We monitor market developments that could have an adverse affect on the supply of essential active pharmaceutical ingredients. All active pharmaceutical ingredients we purchase must comply with high quality standards.

We obtain agricultural raw materials such as flours and sugars from multiple suppliers based in 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.

Marketing and Sales

In Retail Generics, we have a broad portfolio of generic pharmaceutical products that we sell to wholesalers, pharmacies, hospitals, and other healthcare outlets. Depending on the structure of the local market, customers are supplied with finished dosage forms either by the field service team of the local Sandoz affiliate or by established partners or joint venture associates.

Anti-Infectives supplies Retail Generics and the pharmaceutical industry worldwide with active pharmaceutical ingredients and their intermediates, mainly in the field of antibiotics.

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 pharmaceutical products for bioequivalent branded pharmaceutical products. 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 product for the brand-name version of the product. In Europe, the use of generic pharmaceuticals is growing, yet 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.

For follow-on protein products, the regulatory pathways for approving such products are newly-established or are still in development. As a result, policies concerning the substitutability of such products for the branded version and regarding reimbursement for the generic product are still undefined in many markets.

Competition

The market for generic products is characterized by increasing demand for high-quality pharmaceuticals that can be produced at lower costs due to minimized initial research and development investments. Increasing pressure on healthcare expenditures and numerous patent and data exclusivity period expirations have created a favorable market environment for the generics industry. This positive

market trend, however, brings increased competition among the companies selling generic pharmaceutical products, leading to ongoing price pressure on generic pharmaceuticals.

In addition, research-based pharmaceutical companies have responded to the increased competition from generic products by licensing their branded products to generic companies (the so-called "authorized generic"). By doing so, research-based pharmaceutical companies participate in the conversion of their branded product, once generic conversion begins. Consequently, generic companies that were not in a position to compete on a specific product are allowed to enter the generic market using the innovator's product. In the US, the authorized generic is not subject to the US Hatch-Waxman Act rules regarding exclusivity (See " Regulation"). The company that launches an authorized generic typically enters the market at the same time as the generic exclusivity holder. This tends to reduce the value of the exclusivity for the company that invested in creating the first generic. Furthermore, certain research-based companies continually seek new ways to protect their market franchise and to decrease the impact of generic competition. For example, recently some research-based pharmaceutical companies have reacted to generic competition by decreasing the prices of their branded product, thus seeking to limit the profit which the generic companies can earn on the competing generic product.

Research and Development

Before a generic pharmaceutical may be marketed, intensive technical and clinical development work must be performed in order to demonstrate in bio-availability studies the bio-equivalency of the generic product to the reference product. Nevertheless, research and development costs associated with generic pharmaceuticals are much lower than those of the established counterparts, as no Phase I to Phase III clinical trials must be performed by the generic competitor. As a result, pharmaceutical products for which the patent and data exclusivity period has expired can be offered for sale at prices much lower than those of products protected by patents and data exclusivity, which must recoup substantial basic research and development costs through higher prices over the life of the product's patent and data exclusivity period.

For follow-on protein products, in many countries, the regulatory pathways for approving such products are still in development. However, at least for certain biopharmaceutical products, Phase I to Phase III clinical trials do appear to be required.

Currently, the affiliates of the Sandoz Division employ more than 1,000 Development and Registration staff who explore alternative routes for the manufacture of known compounds and who develop innovative dosage forms of generic medicines. These associates are based worldwide, including major facilities in Holzkirchen and Rudolstadt, Germany; Kundl and Schaftenau, Austria; Menges and Ljubljana, Slovenia; Kolshet, India; Boucherville, Canada; Wilson, North Carolina.

In 2006, Sandoz invested $477 million in product development, which amounted to 8% of net sales. We had long-term research commitments totaling $20 million in the aggregate as of December 31, 2006. We intend to fund these expenditures from internally generated resources.

Regulation

The Hatch-Waxman Act in the US (and similar legislation in the EU and in other countries) eliminated the requirement that generic pharmaceutical manufacturers repeat the extensive clinical trials that are required for originator products, so long as the generic version could be shown in bio-availability studies to be of identical quality and purity, and to be biologically equivalent to the reference product.

In the US, the decision whether a generic pharmaceutical is bioequivalent to the original branded product is made by the FDA based on an Abbreviated New Drug Application (ANDA) filed by the generic product'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 Hatch-Waxman Act requires a generic manufacturer to certify in certain situations that the generic product does not infringe on any current applicable patents on the

product 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 patent holder against the generic company. In the event of such a lawsuit, the Hatch-Waxman Act imposes an automatic 30-month delay in the approval of the generic product in order to allow the parties to resolve the intellectual property issues. For generic applicants who are the first to file their ANDA containing a certification claiming non-infringement or patent invalidity, the Hatch-Waxman Act provides those applicants with 180-days of marketing exclusivity to recoup the expense of challenging the innovator patents. However, amendments to the Hatch-Waxman Act may affect the availability of generic marketing exclusivity in the future. The amendments now require generic applicants to launch their products within certain time frames or risk losing the marketing exclusivity that they had gained through being a first-to-file applicant.

In the EU, decisions on the granting of a marketing authorization are made either by the EMEA under the Centralized Procedure, or by a single Member State, after which the MRP, as a decentralized procedure, may be followed. See "Pharmaceuticals Regulation European Union." Companies may submit Abridged Applications for approval of a generic medicinal product based upon its "essential similarity" to a medicinal product authorized and marketed in the EU following the expiration of the product's patent. After a period of from six to ten years (depending on the Member State) after the product received a marketing authorization in the EU, the generic company may submit its Abridged Application in reliance upon the data submitted by the medicine's innovator, without the necessity of conducting extensive Phase III clinical trials of its own. According to recent legislation, for all products that received a marketing authorization in the EU after late 2005, the Abridged Application can be submitted throughout the EU. However, the data submitted by the innovator in support of its application for a marketing authorization for the reference product will now be protected for ten years after the first grant of marketing authorization in all Member States, and can be extended for an additional year if a further innovative indication has been authorized for that product, based on pre-clinical and clinical trials filed by the innovator that show a significant clinical benefit in comparison to the existing therapies. Because this recent legislation extended the ten-year protection period throughout the EU and offered the opportunity for an extension of the existing data protection period, it is possible that future launches of generic products will be delayed in certain in EU countries.

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 also may 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 addition, we face the risk that generic competitors may file patents to protect product developments that could block Sandoz own development projects. If this were to occur, we could be forced to terminate a development program, which would require us to write off any resources invested in that project, and incur a loss of revenue.

We are currently involved in litigation in a number of countries with affiliates of AstraZeneca plc regarding omeprazole, our generic version of AstraZeneca's Prilosec®. We launched omeprazole in the US in August 2003. While some of the European cases have been decided on in our favor, many of the cases, including the cases pending in the US, may continue for some time. 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.

CONSUMER HEALTH

Our Consumer Health Division is a world leader in the research, development, manufacturing and marketing of a wide range of competitively differentiated products that restore, maintain or improve the health and well-being of consumers. The business of Consumer Health is conducted by a number of affiliated companies throughout the world. Created in January 2002, the Consumer Health Division continuing operations consists of the following four Business Units:

Over-the-Counter (OTC) self-medication

Animal Health

Gerber

CIBA Vision

As of December 31, 2006, the affiliates of our Consumer Health Division continuing operations employed 17,658 associates worldwide. In 2006, the affiliates of our Consumer Health Division achieved consolidated net sales from continuing operations of $6.5 billion, which represented 18% of the Group's total net sales from continuing operations.

Our Consumer Health Division places considerable emphasis on the development of strong, consumer-oriented and trustworthy brands. To deliver accelerated sales growth and to achieve leadership positions in the fields in which we compete, our Consumer Health Division seeks to give voice to the consumer and to determine the needs and desires of consumers.

In the dynamic world of consumer healthcare, consumers are becoming more knowledgeable about health and the benefits of self-medication and balanced nutrition. The success of each Business Unit depends upon its ability to anticipate and meet the needs of consumers and health professionals worldwide.

The Medical Nutrition Business Unit was previously included in the Consumer Health Division, but has been classified as a discontinuing operation in all periods in the Group's consolidated financial statements, as a consequence of announcements during 2006 to divest the activities of this Business Unit. On February 17, 2006, Novartis completed the sale of Nutrition & Santé for $211 million to ABN AMRO Capital France, resulting in a pre-tax divestment gain of $129 million. On December 14, 2006, Novartis announced the signing of a definitive agreement to divest the balance of the Medical Nutrition Business Unit to Nestlé S.A., Switzerland for $2.5 billion. This transaction, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007.

Sandoz (generics) was a Business Unit of the Consumer Health Division until December 31, 2004, after which time it became a separate Division. The results of the Consumer Health Division do not include Sandoz' sales.

The following is a description of the four Consumer Health Division Business Units, and of the Medical Nutrition discontinuing operation:

OTC is a world leader in offering products for the treatment and prevention of common medical conditions and ailments, to enhance people's overall health and well-being. The business of OTC is conducted by a number of affiliated companies in more than 50 countries with 4,495 associates as of December 31, 2006. The OTC business focuses on a group of strategic global brands in leading product categories that include cough, cold and allergy treatments (*Triaminic* and *NeoCitran/TheraFlu*), headache relief (*Excedrin*), pain relief (*Voltaren*), gastrointestinal treatments (*Benefiber/NovaFibra* and *Ex-Lax*), dermatological treatments (*Lamisil*^{AT}), anti-gas treatments (*Gas-X*),

vitamin supplements (sold by OTC under the *Sandoz* brand name) and smoking cessation treatments (*Nictonell/Habitrol*). In August 2005, we significantly strengthened our OTC business in the US by acquiring the OTC business of Bristol-Myers Squibb, including *Excedrin.* In addition, in December 2005, we signed an agreement with TAP Pharmaceutical Products to acquire the right to develop an OTC version of the prescription drug Prevacid®, one of the leading medicines for acid reflux disease and heartburn.

Animal Health offers products and services to save, prolong and improve animal lives, focusing on both companion and farm animals (including farmed fish). The business of Animal Health is conducted by affiliated companies in 38 countries with 2,501 associates as of December 31, 2006. Animal Health has a dedicated research and development team, which benefits from synergies with other Novartis businesses, most notably research in the Pharmaceuticals Division. Key products for companion animals include *Atopica* (atopic dermatitis management), *Deramaxx* (pain relief) and *Sentinel/Milbemax/Interceptor* (intestinal and heart worm control), while leading farm animal products include the farm fly control product *Agita* and the therapeutic anti-infective *Tiamutin/Denagard*, an effective broad-spectrum antimicrobial used to treat and control bacteria in swine. Acquaculture products include vaccines and treatments mainly used in salmon farming. In October 2005, Animal Health acquired the North American rights to the *Denagard* (tiamulin) franchise from Boehringer Ingelheim Vetmedica, Inc. Novartis previously had the rights to market this compound in all key swine markets outside North America.

Since 1928, Gerber has been committed to helping parents raise happy, healthy babies. Gerber does extensive scientific research aimed at understanding and improving infant and toddler nutrition and development. It is the leading baby food brand in the US with more than 200 food products. Gerber products are also marketed in several other countries. The business of Gerber is conducted by affiliated companies in more than 50 countries. As of December 31, 2006 Gerber employed 4,547 associates. In 2006, Gerber launched 89 new or renovated products, the largest in Gerber's 78-year history. Some of the highlights include the launch of Gerber Organic Baby Food, a full-line of organic food with products including cereals, purees, and toddler foods. Additionally, Gerber introduced *Lil' Soups*, a wholesome food for toddlers that contains less sodium than leading canned soups. Through Gerber's "*Start Healthy, Stay Healthy*" campaign, it continues to proactively address the obesity epidemic in the US. Together with the American Dietetic Association, Gerber introduced a set of dietary guidelines for babies and toddlers under the age of two years. The aim of *Start Healthy, Stay Healthy* is to provide parents and nutrition professionals with practical advice about the importance of beginning, and instilling, healthy eating habits early in life. Gerber also manufactures a baby-care line featuring nursing and feeding aids, wellness products such as lotions and washes and offers life insurance products.

CIBA Vision is a global leader in the research, development, and manufacturing of contact lenses and lens care products. The business of CIBA Vision is conducted by affiliated companies in nearly 40 countries with 6,071 associates as of December 31, 2006. CIBA Vision is committed to the research and development of innovative products, processes and systems. R&D efforts have produced lenses such as O_2*OPTIX/AIR OPTIX* and *NIGHT & DAY*, both of which have high-oxygen transmissibility, and *Focus DAILIES* daily disposable lenses. CIBA Vision is also the world's leading provider of cosmetic contact lenses to change and enhance eye color through products such as *FreshLook* lenses. In lens care, CIBA Vision has developed many innovative products, particularly multi-purpose solutions in one bottle such as *AQuify/SOLO-care AQUA* and the *Clear Care/AOSEPT Plus* peroxide system.

Medical Nutrition (discontinuing operations) is a global leader in the growing medical nutrition market. The business of Medical Nutrition is conducted by affiliated companies in 47 countries with 1,946 associates worldwide as of December 31, 2006. Medical Nutrition offers high-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. This broad range of supplements, enteral tube feedings and food provides essential nutrients for good nutrition when illness or disabilities

limit a person's ability to eat a balanced diet. These products include the oral nutritional liquid supplements *Boost* and *Resource* as well as *Compat*, a range of devices to deliver tube feeds to the gastrointestinal tract. In February 2006, we divested the Nutrition & Santé business that was formerly reported within the Medical Nutrition Business Unit results. In February 2005, we reached a settlement with the US Attorney for the Southern District of Illinois in connection with the federal government's investigation of the enteral nutrition industry.

Principal Markets

The principal markets for the Consumer Health Division are the US and Europe. The following table sets forth the aggregate 2006 net sales of the Consumer Health Division by region:

Consumer Health	**Net Sales 2006**	
	($ millions)	**(%)**
United States	3,063	41
Americas (except the United States)	689	9
Europe	2,112	28
Rest of the World	676	9
Net sales from continuing operations	**6,540**	**87**
Net sales from discontinuing operations	989	13
Total net sales	**7,529**	**100**

Sales of our OTC Business Unit are marked by a high degree of seasonality, with our cough, cold and allergy brands significantly impacted by the timing and severity of the annual cold and flu and allergy seasons. Sales of our Animal Health Business Unit also fluctuate seasonally, and can be significantly affected by climatic and economic conditions, and by changing health or reproduction rates of animal populations. Sales of the vast majority of our other products are not subject to material changes in seasonal demand.

Production

OTC: Our OTC Business Unit has a manufacturing and supply infrastructure comprised of the Business Unit's own plants, strategic third party suppliers 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.

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

Gerber: Gerber operates its own production facilities in North America, South America and Eastern Europe for nutrition and Baby Care products. Major production sites are in Fremont, Michigan; Fort Smith, Arkansas; Reedsburg, Wisconsin; Querétaro, Mexico; Rzeszow, Poland; Cartago, Costa Rica and Valencia, Venezuela. In addition, Gerber contracts with 17 companies in the US and 23 globally for the manufacture of our nutrition products, and with 48 companies for our Baby Care products.

CIBA Vision: CIBA Vision has major production facilities in Batam, Indonesia; Duluth, Georgia; Des Plaines, Illinois; Grosswallstadt, Germany; Cidra, Puerto Rico; Singapore; and Mississauga, Canada.

Medical Nutrition: 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 dedicated Medical Nutrition plants are located in Minneapolis, Minnesota and Osthofen, Germany.

The goal of our supply chain strategy is to produce and distribute high quality products efficiently. 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. Some of our production facilities are unionized, including some Gerber and CIBA Vision facilities. We have experienced supply interruptions in the past and there can be no assurance that supply will not be interrupted again in the future as a result of unforeseen circumstances. In late 2005, CIBA Vision experienced a significant, but non-material temporary halt in lens care product production, which impacted supply. The issue was successfully resolved, and CIBA Vision resumed lens care product production in early 2006. In early 2007, CIBA Vision initiated a voluntary trade-level recall of selected lots of spherical O_2OPTIX/AIR OPTIX (lotrafilcon B) contact lenses distributed primarily in the US, and to a lesser degree in other countries, excluding Japan. No other CIBA Vision lenses are involved with this recall. CIBA Vision has notified the appropriate health authorities of this voluntary trade-level recall.

While production practices may vary from Business Unit to Business Unit, we generally 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. To limit the volatility of prices charged to us for raw materials, where practical and beneficial, we make use of long-term supply agreements. We also proactively monitor markets and developments that could have an adverse effect on the supply of essential materials.

Marketing and Sales

OTC: OTC aims to be a leading global participant in fulfilling the needs of patients and consumers for self-medication healthcare. Strong, leading brands, science-based products and in-house marketing and sales organizations are key strengths in pursuing this objective. We engage in general public relations activities, including media advertisements, brand websites and other direct advertisements of brands, to the extent permitted by law in each country. We distribute our products through various channels such as pharmacies, food, drug and mass retail outlets.

Animal Health: Animal Health's products are mostly prescription-only treatments for both farm and companion animals. The major distribution channel is veterinarians either directly or through wholesalers of veterinary products. Primary marketing efforts are targeted at veterinarians using such marketing tools as targeted personal selling, printed materials, direct mail, advertisements, articles in the veterinary special press, and conferences and educational events for veterinarians. In addition, we engage in general public relations activities, including media advertisements, brand websites and other direct advertisements of brands, to the extent permitted by law in each country.

Gerber: The mission of the Gerber Business Unit is to leverage our brand leadership of trust in helping parents raise happy, healthy babies into the leading infant and baby brand around the world. Gerber continues to work with the government and experts in the field of nutrition under its "*Start Healthy, Stay Healthy*" campaign to help parents start their babies on a lifetime of healthy eating habits. Strong brands and innovative product development that is based on sound nutrition principles, as well as in-house marketing and sales organizations are some of Gerber's key strengths. Gerber products are distributed through food, drug and mass merchandiser retail outlets.

CIBA Vision: In most countries, contact lenses are available only by prescription. CIBA Vision lenses can be purchased from eye care professionals and optical chains subject to country regulation. CIBA Vision's lens care products can be found in major drug, food, mass merchandising and optical retail chains in the United States, Europe, Japan and elsewhere subject to country regulations. In addition, mail order and Internet sales of contact lenses are becoming increasingly important channels in major markets worldwide.

Medical Nutrition: The majority of the Medical Nutrition Business Unit's net sales are to healthcare delivery settings such as hospitals and nursing homes as well as home healthcare and group purchasing organizations. Our products are also used independently by patients at home. We also have a significant level of retail business, principally in the US market. This retail business benefits from a collaboration with the Gerber sales force of our Gerber Business Unit, which markets the *Boost* brand in the US retail channel. 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

The global market for products of the type sold by our Consumer Health Division is highly competitive, and we compete against other major international corporations with substantial financial and other resources. Competition within the 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.

Research and Development

OTC: 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.

Animal Health: Novartis Animal Health has dedicated research and development facilities in Switzerland, North America and Australia. The main focus for research is identification of potential new parasiticides. In addition, in the US and Canada, we devote resources to the quest for new vaccines for farm animals and farmed fish. In addition, our researchers exploit synergy with other Novartis businesses and also collaborate with external partners to develop veterinary therapeutics. Drug delivery projects, some in collaboration with external partners, concentrate on our key treatment areas and aim to improve efficacy and ease of use.

Gerber: Gerber's Research and Development department uses a multi-faceted approach to deliver consumer innovation by developing new processes, products and packaging for the nutrition, Baby Care and Wellness franchises. In addition, Gerber Research and Development oversees research regarding the needs of infants and their development. For example, as a part of the "*Start Healthy, Stay Healthy*" campaign, 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 four to 24 months of age. The results of this study were published in January 2004, in a special supplement to the Journal of the American Dietetic Association. In January 2006, new findings from FITS showed that toddlers are consuming too much sodium and inadequate amounts of potassium. 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 have formed the core of the "*Start Healthy, Stay Healthy*" campaign.

CIBA Vision: CIBA Vision invests substantially in internal research and development operations, which yield new chemistries, lens designs and surfaces, and processing technologies. These resources are complemented by licensing agreements and joint research and development partnerships with third parties. For contact lenses our key focus is in three areas: daily disposable contact lenses, silicone hydrogel lenses and cosmetic lenses. In lens care, our development efforts focus on making our lens care solutions more convenient to use, especially with the latest generation of breathable, high-oxygen transmissible contact lenses, while ensuring that the solutions provide the safety and cleaning power needed to help maintain ocular health.

Medical Nutrition: 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 2006, the Consumer Health Division continuing operations invested $288 million in research and development, which amounted to 4.4% of net sales. We have long-term research commitments totaling $17 million in the aggregate as of December 31, 2006. We intend to fund these expenditures from internally generated resources.

Regulation

OTC: 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.

Animal Health: 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 target animal and user safety, environmental fate and toxicology, efficacy in laboratory and clinical studies, information on manufacturing, quality control and labeling as well as on residues and food safety if applied to food-producing animals. 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 from the EU Commission (community authorization) following either the Centralized Procedure, Mutual Recognition Procedure or the new Decentralized Procedure. See "Pharmaceuticals Regulation." In Japan, veterinary medicinal products are approved by the Ministry of Agriculture, Forestry and Fisheries (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. In addition, any product that is intended for food animals or fish is reviewed by the Food Safety Commission, which was newly established in July 2003, to evaluate the risks to human health of any composition in the products.

Gerber, Medical Nutrition: 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. Many countries require food products to be registered in order to document the safety and nutrition of imported food products. 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, and the EPA 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. In the US, the Medical Nutrition Business Unit's products are covered by FDA regulations covering medical foods, dietary supplements and medical devices. Similar regulations exist in the European Union and other markets. 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. In addition, in the US, the Consumer Product Safety Commission is responsible for overseeing the safety of Gerber's Baby Care products.

CIBA Vision: Contact lenses, and lens care products are regulated as medical devices in the US and the EU, and as devices and drugs in 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, safety and effectiveness information for Class II and III devices must be reviewed by the FDA. There are two review procedures: a Pre-Market Approval (PMA) and a Pre-Market Notification (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. Under Pre-Market Notification (510(k)), the manufacturer submits notification to the FDA that it intends to commence marketing the product, with data that establishes the product as substantially equivalent to another product already on the market. The FDA has 90 days to review and clear a 510(k) submission. In the EU, the CE marking is required for all medical devices sold. CIBA Vision GmbH, as the European representative of CIBA Vision, maintains CE marking for the products that are sold in the EU. By affixing the CE marking, the manufacturer certifies that a product is in compliance with provisions of the EU's Medical Device Directive. CIBA Vision maintains a full Quality Assurance system and is subject to routine auditing by a certified third party ("Notified Body") to ensure that this quality system is in compliance with the requirements of the EU's Medical Device Directive as well as the requirements of the ISO quality systems' standard ISO 13485. In Japan, contact lenses are categorized as medical devices and are subject to an approval process similar to that in the US. The regulatory climate is changing in Japan and there is a willingness to accept foreign data and a movement toward harmonization of requirements, in order to enter the Japanese market. Local clinical trials are often required and local protocols must then be observed. Some lens care products are considered drugs in Japan and may take several years to gain approval due to the extensive amount of data and clinical testing required.

Intellectual Property

Our Consumer Health businesses are 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.

Our Consumer Health businesses also sell products which are not currently covered by patents. Some of these products have never been patent-protected and others have lost protection due to patent expiry.

CIBA Vision has settled all patent litigation against Bausch & Lomb regarding patents covering silicone hydrogel long-term wear contact lenses (the "Nicolson" patents). The settlement requires Bausch & Lomb to pay CIBA Vision a royalty on their PureVision sales until 2014 in the US and until 2016 in other countries. As part of the settlement, Bausch & Lomb granted a royalty-free license to CIBA Vision for certain of its patents related to silicone hydrogel technology.

Several lawsuits are pending relating to the Nicolson patents, which protect CIBA Vision *NIGHT & DAY* and *O_2OPTIX* silicone hydrogel contact lens technology. Johnson & Johnson filed a suit against CIBA Vision in 2003, seeking a declaration that their Acuvue® Advance product does not infringe the Nicolson patents and/or that the patents are invalid. Two subsequent additional suits were filed by Johnson & Johnson, seeking declaration that the launch of their Oasys and Advance toric products do not infringe these CIBA Vision patents. Discovery is ongoing in these cases.

Similarly, CooperVision filed suit in April 2006 seeking a declaratory judgment of invalidity and non-infringement of the Nicolson patents, and alleging infringement of five patents relating to optical designs and edge profiles of certain kinds of contact lenses by CIBA Vision's product, *O_2OPTIX*.

Rembrandt Vision Technologies has also filed a patent infringement suit against CIBA Vision in October 2005. The asserted patent relates to the surface treatment of lenses and involves CIBA Vision's *O_2OPTIX* and *NIGHT & DAY*, products.

4.C Organizational Structure

See "Item 4. Information on the Company 4.A History and Development of Novartis."

4.D Property, Plants and Equipment

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

It is generally our policy to own our facilities. However, a few sites 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, 2006, 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 (in square meters)	Major Activity
Major Production facilities:		
Pharmaceuticals		
Ringaskiddy, Ireland	532,000 square meters	Drug substances, intermediates
Basel, Switzerland Klybeck	235,000 square meters	Drug substances, intermediates
Basel, Switzerland St. Johann	225,000 square meters	Drug substances, intermediates, biotechnology
Basel, Switzerland Schweizerhalle	230,000 square meters	Drug substances, intermediates

Stein, Switzerland	358,000 square meters	Steriles, ampules, vials, tablets, capsules, transdermals
Grimsby, UK	450,000 square meters	Drug substances, intermediates
Suffern, NY	656,000 square meters	Tablets, capsules, transdermals
Horsham, UK	112,000 square meters	Tablets, capsules
Wehr, Germany	58,000 square meters	Tablets, creams, ointments
Torre, Italy	210,000 square meters	Tablets, biotechnology
Barbera, Spain	51,000 square meters	Tablets, capsules
Huningue, France	92,000 square meters	Suppositories, liquids, solutions, suspensions, biotechnology
Kurtkoy, Turkey	109,000 square meters	Tablets, capsules, effervescents
Sasayama, Japan	104,000 square meters	Capsules, tablets, syrups, suppositories, creams, drop solutions, powders
Vaccines and Diagnostics		
Emeryville, CA	111,500 square meters (production and R&D facilities; includes Pharmaceuticals facilities)	Biopharmaceuticals, vaccines and blood testing
Liverpool, UK	61,000 square meters	Influenza vaccines
Ankleshwar, India	8,700 square meters	Vaccines
Marburg, Germany	40,000 square meters (production and R&D facilities)	Vaccines
Siena/Rosia, Italy	91,000 square meters (production and R&D facilities)	Vaccines
Sandoz		
Taboão da Serra, Brazil	500,712 square meters	Capsules, tablets, syrups, suppositories, suspensions, creams, drop solutions, powders
Kundl and Schaftenau, Austria	449,000 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
Barleben, Germany	95,000 square meters	Broad range of finished dosage forms
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
Radebeul, Germany	40,000 square meters	Active drug substances
Cambé, Brazil	32,000 square meters	Broad range of finished dosage forms
Wilson, NC	31,000 square meters	Broad range of finished dosage forms
Stryków, Poland	20,000 square meters	Broad range of finished dosage forms
Gebze, Turkey	18,000 square meters	Broad range of finished dosage forms
Palafolls, Spain	13,000 square meters	Injectable products
Kalwe, India	10,000 square meters	Broad range of finished dosage forms
Boucherville, Canada	10,675 square meters (production and R&D facilities)	Injectable products
Consumer Health		
OTC		
Lincoln, NE	44,870 square meters (production and R&D facilities)	Tablets, liquids and creams
Nyon, Switzerland	14,700 square meters (production and R&D facilities)	Liquids and creams
Humacao, Puerto Rico	8,000 square meters	Tablets and secondary product packaging
Animal Health		
Wusi Farm, China	39,000 square meters	Insecticides, antibacterials, acaricides, powders
Dundee, UK	10,500 square meters	Packaging, formulation of liquids, solids, creams, sterile filling

Larchwood, IA	13,000 square meters (production and R&D facilities)	Veterinary immunologicals
Braintree, UK	6,000 square meters	Veterinary immunologicals
Huningue, France	5,000 square meters	Formulation and packaging of tablets, creams, ointments, suspensions and liquids
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 products
Gerber		
Fremont, MI	107,000 square meters (production and R&D facilities)	*Gerber* baby food, juices, dry boxed cereal
Fort Smith, AR	80,451 square meters	*Gerber* baby food, dry cereal
Querétaro, Mexico	205,000 square meters	*Gerber* baby food, juices, dry cereal
Reedsburg, WI	30,000 square meters	Baby Care products; spill- proof cups, bottles, nipples, breast pads, pacifiers, overcaps
Campo Grande, Brazil	89,000 square meters	Baby Care products; spill- proof cups, bottles, nipples, breast pads, pacifiers, overcaps
Cartago, Costa Rica	61,700 square meters	Food ingredients, *Gerber* baby food, juices, dry cereal
Valencia, Venezuela	45,600 square meters	*Gerber* baby food, juices, Ovaltine
Rzeszow, Poland	45,000 square meters	*Gerber* baby food, fruit juice
CIBA Vision		
Singapore	19,200 square meters	Contact lenses
Pulau Batam, Indonesia	27,000 square meters	Contact lenses
Duluth, GA	34,000 square meters	Contact lenses
Des Plaines, IL	27,400 square meters	Contact lenses
Grosswallstadt, Germany	23,000 square meters	Contact lenses

81

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	88,300 square meters	General pharmaceutical products
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
Vaccines and Diagnostics		
Emeryville, CA	111,500 square meters (production and R&D facilities; includes Pharmaceuticals facilities)	Vaccines and blood testing
Marburg, Germany	40,000 square meters (production and R&D facilities)	Vaccines
Siena/Rosia, Italy	91,000 square meters (production and R&D facilities)	Vaccines
Sandoz		
Kundl and Schaftenau, Austria	449,000 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 and new delivery systems
Wilson, NC	31,000 square meters (production and R&D facilities)	Broad range of finished dosage forms

Rudolstadt, Germany	8,200 square meters (production and R&D facilities)	Inhalation technology, ophthalmics and nasal products
Holzkirchen, Germany	17,200 square meters	Broad range of innovative dosage forms, including implants and transdermal therapeutic systems
Kolshet, India	9,000 square meters	Generic pharmaceuticals
Boucherville, Canada	10,675 square meters (production and R&D facilities)	Injectable products
Consumer Health		
OTC		
Lincoln, NE	44,870 square meters (production and R&D facilities)	Tablets, liquids and creams
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	13,000 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 products
Gerber		
Fremont, MI	107,000 square meters (production and R&D facilities)	Baby food products
CIBA Vision		
Duluth, GA	12,500 square meters	Vision-related medical devices
Grossostheim, Germany	4,000 square meters	Vision-related medical devices

Progress is being made in the long-term redevelopment of our St. Johann headquarters site in Basel, Switzerland. This project, called "Campus," was started in 2001 with the aim of transforming the site into a center of knowledge with a primary emphasis on international corporate functions and research activities. Research and Development now accounts for a greater proportion of our activities at the site, and changes need to be made to the Campus, since the site had been designed primarily for pharmaceuticals production. To date, the total amount paid and committed to be paid on the Campus Project is $670 million. We expect that, through 2011, we will spend more than $1.7 billion at the Campus and to transfer production facilities from the Campus to other sites in the Basel region. We intend to fund these expenditures from internally developed resources.

Work continues at our Pharmaceuticals Division's US headquarters in East Hanover, New Jersey to create a world class campus to support our growth. The first phase is planned for completion in 2007 and will create 960 work stations and an above ground parking garage to accommodate 1,075 vehicles. Further site development plans covering the next six years are currently in the early stages of development. This plan, known as the West Village, is expected to add approximately 2,500 workstations in seven newly-constructed buildings, along with a 3,500-vehicle underground parking garage. A temporary parking facility is currently under construction and site preparation work is planned for 2007, so that construction may begin in 2008 on the West Village project. Total capital spending in 2006 reached $91 million with an additional $124 million planned for 2007.

In May 2007, we plan on opening a start-up facility for our new R&D center in Shanghai, China. This 5,000 square meter laboratory will be home to approximately 160 scientists who will be hired over time. In July, we expect to break ground on a 40,000 square meter facility that will be home to approximately 400 R&D scientists. An initial investment of $100 million is planned for the construction of the two facilities.

In 2006, our Pharmaceuticals Division invested approximately $101 million at its production facility in Grimsby, UK, on a capacity increase and production campaign to support the technical launch of *Tekturna/Rasilez*. In addition, we invested $58 million to create a new Chemical Operations production facility in China. We also spent more than $61 million on the construction of a new Pharmaceuticals plant in Singapore.

In July 2006, our Vaccines and Diagnostics Division announced the intention to build a cell culture-based manufacturing site in Holly Springs, North Carolina. The total investment in this new facility is expected to be around $600 million.

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 associates 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 $72 million in 2006 ($19 million for environment), $66 million in 2005 ($16 million for environment), and $79 million in 2004 ($10 million for environment). Expenditures by Chiron Corporation are not included in these amounts. While we cannot predict with certainty our aggregate capital environmental investments in 2007, based on current information and existing assets, we estimate that such aggregate expenditures will be comparable to the 2006 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 or cash flows in a given period.

Item 4A. Unresolved Staff Comments

Not applicable

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 International Financial Reporting Standards. Please see "Item 18. Financial Statements note 33" for a discussion of the significant differences between IFRS and US Generally Accepted Accounting Principles.

In order to assist our investors and analysts in their understanding of our results by having comparable information, we provide 2004 pro forma consolidated income and cash flow statements that include additional adjustments compared to our 2004 consolidated income and cash flow statements. In addition, the results of our Medical Nutrition Business Unit are shown as discontinuing operations. See " Factors Affecting Comparability of Year-on-Year Results of Operations" for a more detailed discussion.

OVERVIEW

We are a world leader in offering medicines to protect health, treat disease and improve well-being. Our goal is to discover, develop and successfully market innovative products to treat patients, ease

suffering and enhance quality of life. We are the only company with leadership positions in both patented and generic pharmaceuticals as well as human vaccines and OTC products. Our businesses are divided on a worldwide basis into the following four operating divisions:

Pharmaceuticals (brand-name patented pharmaceuticals)

Vaccines and Diagnostics (human vaccines and molecular diagnostics)

Sandoz (generic pharmaceuticals)

Consumer Health (OTC, Animal Health, Gerber and CIBA Vision)

Vaccines and Diagnostics is a new division formed in 2006 following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis.

Our Medical Nutrition Business Unit was previously included in the Consumer Health Division, but has been classified as a discontinuing operation as a consequence of an announcement during 2006 to divest this business unit. The Nutrition & Santé activity of this business unit which was divested in February 2006 has also been classified as a discontinuing operation.

In 2006, we achieved Group net sales of $37.0 billion (2005: $32.2 billion) and net income of $7.2 billion (2005: $6.1 billion). Approximately $5.4 billion was invested in R&D (2005: $4.8 billion).

Headquartered in Basel, Switzerland, we employ approximately 101,000 associates and have operations in approximately 140 countries around the world.

FACTORS AFFECTING RESULTS OF OPERATIONS

There are a number of key factors that influence our results of operations and the development of our business.

The overall global healthcare market is growing rapidly, due to a combination of socio-economic factors, including aging populations in many developed countries and rapid economic growth in many developing countries, which is leading to a change in lifestyles and a growing demand for better healthcare. At the same time, we are operating in an ever more challenging competitive environment and the healthcare industry is generally subject to significant ongoing pricing pressures. Widespread efforts by both governments and private stakeholders to control and reduce healthcare cost create particular challenges for our Pharmaceuticals Division.

To address these challenges, we have established several strategic growth platforms, both with brand-name patented medicines and beyond, including innovation-driven prescription medicines, cost-effective and high-quality generic medicines, leading self-medication (OTC) brands and human vaccines. We have invested heavily into these strategic growth platforms in recent years, including through the acquisitions of Chiron Corporation and NeuTec Pharma plc in 2006 and Hexal AG and Eon Labs, Inc., and the North American Consumer Medicines Business of Bristol-Myers Squibb in 2005.

Patent protection and the exclusive right to sell certain products in key markets are particularly important for our Pharmaceuticals Division. The loss of exclusivity with regard to one or more important products (e.g. due to patent expiration, generic challenges or competition from new branded products) can therefore have a significant negative impact on the results of operations of our Pharmaceuticals Division. As a result, our ability to identify and develop new breakthrough products and to bring these products to market is particularly important for our long-term business prospects. To be able to meet this challenge, we have invested heavily in R&D and plan to continue to do so in the future. The loss of patent protection for important products by competing pharmaceuticals companies, of course, can also create significant opportunities for our Sandoz Division to market generic versions of such products.

Finally, we are constantly exploring ways to improve productivity across the Group, in particular to optimize our Marketing & Sales activities in our Pharmaceuticals Division. The failure or success of these initiatives can have a significant impact on our overall business success.

We believe that these factors, which are described in more detail below, will continue to be the principal drivers for the development of our business, our results of operations and our financial condition over the coming years.

Rapidly Growing Global Healthcare Market

The global healthcare market is growing rapidly based on a combination of many factors that include demographic changes and other socio-economic developments. The most important demographic change is the increasingly aging population in developed countries and the fact that the incidence and prevalence of disease rises with age. Other key socio-economic factors include the rising number of people with chronic diseases related to lifestyle changes (particularly hypertension and diabetes) and the demand for better healthcare in many developing countries which are currently witnessing rapid economic growth.

We believe that there are a large number of currently untreated patients worldwide that could benefit from our products, particularly from products marketed by key therapeutic areas of our Pharmaceuticals Division intended to treat patients with cardiovascular/metabolic diseases, cancer, conditions related to the central nervous system, or respiratory illnesses. According to the American Heart Association, for example, high blood pressure and its consequences affect one in four adults more than a billion people worldwide and kill more than seven million people every year while, according to the American Diabetes Association, type 2 diabetes causes three million deaths annually in the US. Both diseases remain under-diagnosed and insufficiently treated.

As a result of these and other factors, we expect the overall healthcare market and our own business to continue to grow over the coming years, not only in developing countries, but also in our key established markets such as the United States, Western Europe and Japan, even if annual industry sales growth in these established markets has slowed in recent years and is likely to continue to slow further due to the pressure of healthcare payors to reduce costs. However, rapid economic growth in many emerging markets such as China, India, Russia and Turkey is expected to increasingly support the global healthcare market. The overall economic expansion in these countries is leading to improvements in the provision of public healthcare. In line with changes in the standard of living and lifestyles, these countries are also experiencing an increasing incidence of chronic diseases.

Our Group net sales, which increased 14% in 2006 in local currencies to $37.0 billion, were still driven mainly by growth in the United States and other developed markets. However, during the same period, our combined net sales in its priority emerging growth markets of China, India, Russia and Turkey rose at a sharply higher rate of 25% in local currencies. Although net sales in these four countries only accounted for 4% of our total net sales in 2006, we expect these and other emerging markets to have an increasingly significant impact on our future business prospects and results of operations.

Challenging Business Environment and Ongoing Pricing Pressures

While the overall healthcare market is growing, the competitive operating environment is becoming ever more challenging, particularly for our Pharmaceuticals Division, as a result of a combination of factors. These include industry-wide price reductions, government-mandated reference prices, an increase in parallel imports, the shifting of the payment burden to patients through higher co-payments and growing pressure on physicians to reduce the prescribing of patented prescription medicines. The outcome has been widespread efforts by various stakeholders to reduce pharmaceutical product prices. We expect this trend to continue as governments and other interested parties step up initiatives to reduce the overall cost of healthcare to patients, restrict the prescribing of new medicines, increase the use of generics and impose overall price cuts. One of the main reasons for these pressures is the cost associated with providing healthcare to an aging population. In addition to pricing pressures, there also appears to be a renewed focus on product safety by regulatory agencies following widely publicized recent product recalls such as Merck & Co., Inc.'s recall of its pain medicine, Vioxx®.

At the same time, competition in the generic pharmaceuticals industry continues to intensify as companies in this industry are also affected by efforts to curb healthcare spending. We are the only major pharmaceuticals company to have a leadership position in both branded pharmaceuticals through our Pharmaceuticals Division as well as in generics through our Sandoz Division. Although the volume of generic pharmaceuticals is growing, pressure is also increasing in some markets, particularly in Europe, to further reduce the price of these medicines.

In addition, research-based pharmaceutical companies have taken aggressive steps to counter the growth of the generics industry by selling their own branded products at sharply lower prices following the expiry of patent protection, which reduces the attractiveness of the generic versions. An important factor is that no significant regulatory approvals are required for a brand-name pharmaceutical manufacturer to sell directly or through a third party to the generic market. This is a significant competitive advantage for the branded pharmaceutical company since, by doing so, the companies offering the branded pharmaceutical are able to undercut the generic manufacturers' revenues and profitability. Certain brand-name pharmaceutical companies are also continually seeking new ways to delay the introduction of generics and to reduce the impact of generic competition. Pricing pressure as well as various efforts by competitors of our Sandoz Division have had, and likely will continue to have, a negative effect on this division's results of operations.

In our newly created Vaccines and Diagnostics Division, the demand for some human vaccines is seasonal, such as for the influenza vaccine *Fluvirin*, while others are dependent upon birth rates in developed countries. Many of these products are also considered to be commodities, meaning that there is little therapeutic difference among the various vaccines offered by competitors. The ability to develop effective and safe vaccines, to gain approval for national immunization recommendation lists, and to consistently produce and deliver the required vaccines in time for the relevant disease season are critical to the success of this division.

Investing in Strategic Growth Platforms

To address the various challenges facing the healthcare industry, we have established and have been making significant investments in a number of strategic growth platforms within all four of our operating divisions. These strategic growth platforms include innovation-driven prescription medicines, cost-effective and high-quality generic medicines, leading self-medication (OTC) brands and human vaccines that address public health and therapeutic needs.

In our Pharmaceuticals Division, we acquired the UK biopharmaceuticals company NeuTec Pharma plc in 2006, giving it access to *Aurograb* and *Mycograb*, two promising development compounds for the treatment of life-threatening infections. Our Vaccines and Diagnostics Division was created in April 2006 following the acquisition of the remaining stake in Chiron Corporation not held by us, providing access to the human vaccines market. In our Sandoz Division, we acquired two generic pharmaceuticals companies (Hexal AG and Eon Labs, Inc.) in 2005, making Sandoz a global leader in generics with particular strengths in difficult-to-make generics and innovative product applications, including device technologies. In our Consumer Health Division, and also in 2005, we acquired the rights to various OTC products in North America from Bristol-Myers Squibb Co. For more details on these acquisitions and how they have affected our results of operations see " Acquisitions and Divestments" below.

We expect these strategic growth platforms to play a significant role in our ongoing success providing opportunities for growth by offering a range of medicines and vaccines to patients, physicians and payors. We will continue to evaluate potential opportunities for additional targeted acquisitions to further strengthen these platforms and to better position the Group for success in a dynamically changing healthcare market.

Loss of Exclusivity for Certain Products

The products of our Pharmaceuticals Division are generally protected by patents that give us the exclusive right to market them in various countries. These exclusive marketing rights are, however, limited both in terms of geographical scope and impacted by the expiration of patents. For example, patents for the antifungal medicine *Lamisil* will expire in June 2007 in the US, where this product accounted for $574 million in annual sales, or 1.6% of the net sales from continuing operations in 2006 (3.9% of the sales from continuing operations in US). Similarly, patent protection for *Trileptal's* active ingredient has expired in the US and other major countries. In 2006, this product accounted for $549 million in sales in the US, or 1.5% of the net sales from continuing operations (3.8% of the sales from continuing operations in US).

In the ordinary course of its business, we (like other major research-based pharmaceutical companies) defend our intellectual property against challenges by generic drug manufacturers. Patent infringement actions have been initiated for a number of our Pharmaceutical Division's products, including *Neoral*, *Lotrel*, *Trileptal*, *Femara*, *Visudyne*, *Exelon* and *Famvir*. Loss of exclusivity and the introduction of a generic version of the same medicine typically results in a significant and sharp reduction in net sales for the relevant product, given that generic manufacturers typically offer their versions of the same medicine at sharply lower prices. Some products that are still among our top-20 selling products have already encountered generic competition in some markets, such as *Lamisil*, *Neoral*, *Sandostatin SC* and *Voltaren*. In addition, some of our products do, or may in the future, face intense competition in the form of new branded products with potentially better safety/efficacy profiles or from generic versions of competing branded drugs indicated for treating the same diseases or indications.

Although we have been rated by industry experts as having one of the lowest rates of net sales at risk to potential generic competition, a number of leading products could potentially face generic competition in the coming five to ten years in various markets, particularly the US and Europe. These include our top-selling products: the anti-hypertension drugs *Diovan* and *Lotrel* as well as the oncology drugs *Gleevec/Glivec* and *Zometa*.

Importance of Research & Development and the ability to obtain approvals for New Products

Our ability to continue to grow our business and to replace any lost sales due to the loss of exclusivity for our products in the future depends upon the ability of our R&D activities to identify and develop high-potential breakthrough products and to bring them to market.

Given that the development and regulatory approval for a new pharmaceutical product frequently takes more than 10 years and can involve costs of over $1 billion, the need for efficient and productive R&D activities is critical to our continued business success. Competition in the development of new pharmaceuticals is intense since other pharmaceutical companies are also searching for efficacious and cost-efficient medicines. The sharply rising resource requirements to access the full range of new technologies, particularly following the decoding of the human genome, has been one reason for industry consolidation as well as for the increase in collaborations between major pharmaceuticals companies and specialized niche players at the forefront of their particular field.

The quality of our current Pharmaceuticals Division development pipeline reflects investments made in our own R&D activities, in many cases more than ten years ago, as well as recent acquisitions and licensing collaborations. We have consistently had one of the highest R&D investment rates in the industry as a percentage of net sales, reflecting our commitment to bring innovative and differentiated products to the market with novel therapeutic benefits.

Up to one-third of annual Pharmaceuticals Division R&D expenditures are used to reach licensing agreements with other companies, particularly specialized biotechnology companies, to co-develop promising pharmaceutical compounds. These co-development and alliance agreements are intended to allow us to capitalize on the potential of these compounds and to expand our development pipeline. We have entered into more than 100 alliances during 2005 and 2006 to complement internal R&D activities.

From time to time, we also make equity investments in a licensing partner or fully acquire a company to gain access to novel compounds, as in the case of the acquisition of NeuTec Pharma plc in 2006.

Funding requirements for R&D activities are likely to continue to grow in the future and may, at times, even grow at a faster rate than net sales. These investments, however, are critical for our continuing success. In 2006, we invested a total of $5.4 billion in R&D, an 11% increase over 2005.

As a result of past investments, we have been able to successfully launch a number of new products in 2006, particularly *Exjade*, *Prexige* and *Xolair* and there are a number of additional product launches scheduled for 2007. Subject to obtaining necessary regulatory approvals, we are planning for multiple new product launches in our Pharmaceuticals Division in 2007-2008 and expect some of these products to generate peak annual sales of over $1 billion. These products include *Tekturna/Rasilez* and *Exforge* for hypertension, *Galvus* for type 2 diabetes, *Tasigna* for cancer and *Lucentis* for age-related macular degeneration.

For further information see "Item 4. Information on the Company Item 4.B Business Overview Pharmaceuticals."

Technology is Driving Innovation

Ongoing technological discoveries and developments are laying the foundation for both improvements upon existing therapies and for innovative treatments for diseases where none currently exist. We expect the growth in new technologies, particularly those that analyze data from the mapping of the human genome, to have a fundamental impact on the pharmaceutical industry and upon our future product pipeline, which in turn could have a significant impact on our results of operations.

Continuing Efforts to Improve Productivity and to Optimize Marketing & Sales Efforts

As a response to the increasingly challenging operating environment for the healthcare industry, as well as, to support the launch of new products and improve profitability margins, we are constantly exploring new ways to further improve productivity across the Group. The guiding principles of all productivity initiatives include innovation, cost savings, process excellence and accountability. In particular, we are constantly reviewing our global production network to achieve efficiencies and to reduce production costs for important products. In our Pharmaceuticals Division, for example, an initiative is underway to reduce annual expenses by more than $1 billion when compared to a 2005 base by the end of 2008 through various initiatives that include streamlining and consolidating operations. We will continue with our efforts to further improve productivity throughout 2007 and beyond, with the objective of making us more efficient and effective.

As the costs involved in developing a new drug and in obtaining the necessary regulatory approvals for marketing a new product continue to increase and the time between innovative products and "me-too" versions or generic competition is continuing to decrease, the importance of effectively marketing a new or existing drug cannot be underestimated. A strong marketing message and rapid penetration of the potential market across different geographic territories are vital if a drug is to attain peak sales as rapidly as possible and maximize the total revenue achievable over its patented life. It is therefore critical to our success that we continually evaluate the appropriateness of our marketing models and optimize our Marketing & Sales efforts, including by adjusting the size of our sales force in key markets to address changing demands (e.g. in anticipation of upcoming new product launches) or by responding to new developments such as the advent of direct-to-consumer advertising in the US. As a result, we have recently added approximately 1,000 new sales representatives in the US to support the launch of new products.

Acquisitions and Divestments

We have made a number of significant acquisitions and divestments in recent years that have had, and are expected to continue to have, a significant impact on our financial condition and results of operations. In particular, the consolidation of Chiron Corporation following its acquisition in April 2006 and the

full-year consolidation of Hexal AG and Eon Labs, Inc. in 2006 following their acquisition in mid-2005 had a significant impact on our results of operations in 2006, as described in more detail below. We will continue to evaluate potential opportunities for additional targeted acquisitions as well as divestments to better position us for success in a dynamically changing healthcare market. As a result of our recent acquisitions, divestments and other factors, our operating income is also increasingly impacted by charges for the amortization of intangible assets as well as impairment charges and other one-time costs relating to the integration of acquisitions.

Acquisitions in 2006

On April 19, 2006, the shareholders of Chiron Corporation approved the acquisition of the remaining 56% of the shares of Chiron Corporation that we did not already own for $48.00 per share. We paid a total of approximately $5.7 billion for the shares, related options of associates and transaction costs. The transaction was completed on April 20, 2006. For the period from January 1, 2006 until completion of the acquisition, the 44% minority interest in Chiron held by us was accounted for using the equity method. For the period after completion of the acquisition, Chiron has been fully consolidated with its identifiable assets and liabilities being revalued to their fair value at the date of acquisition. In 2006, we recorded acquisition-related charges of $451 million net of tax for this transaction.

Following the acquisition, we created the new Vaccines and Diagnostics Division that consists of Chiron's human vaccines and molecular diagnostics businesses. Chiron's pharmaceuticals activities have been integrated into our Pharmaceuticals Division, while early-stage research projects were integrated into our Pharmaceuticals Division research unit, the Novartis Institutes for BioMedical Research (NIBR). For the period following the acquisition up to December 31, 2006, we consolidated the income statement and cash flows from Chiron's pharmaceuticals activities into the Pharmaceuticals Division's results.

On July 14, 2006, we announced that the majority of the shareholders of NeuTec Pharma plc (NeuTec), a biopharmaceuticals company specialized in hospital anti-infectives, had accepted our offer to acquire the company for GBP 10.50 per share. NeuTec has been fully consolidated from this date. We paid a total consideration, including transaction costs, of $606 million to acquire 100% of the shares of the company. NeuTec had no post-acquisition sales, although we have consolidated its expenses into the results of our Pharmaceuticals Division from the acquisition date.

In total, these acquisitions contributed $1.4 billion in net sales for 2006 and resulted in a $242 million operating loss for the Group.

Divestments/discontinuing operations 2006

During 2006, we announced plans to divest the components of our Medical Nutrition Business Unit, which was part of our Consumer Health Division.

On February 17, 2006, we completed the sale of Nutrition & Santé to ABN AMRO Capital France and received gross proceeds for the sale of equity and repayment or assumption of debt of $211 million, resulting in a pre-tax divestment gain of $129 million.

On December 14, 2006, we announced the signing of a definitive agreement to divest the balance of our Medical Nutrition Business Unit to Nestlé S.A., Switzerland for $2.5 billion. This transaction, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007.

Both Nutrition & Santé and Medical Nutrition are disclosed as discontinuing operations in all periods in our consolidated financial statements.

Acquisitions in 2005

On June 6, 2005, we completed the 100% acquisition of Hexal AG for $5.3 billion in cash, with the results consolidated into our Sandoz Division from that date. Goodwill on this transaction at December 31, 2006, amounted to $3.7 billion.

On July 20, 2005, we completed the acquisition of 100% of Eon Labs, inc. for $2.6 billion, with the results consolidated into our Sandoz Division from that date. Goodwill on this transaction at December 31, 2006, amounted to $1.8 billion.

On July 14, 2005, our OTC Business Unit announced the acquisition of the rights to produce and market a portfolio of over-the-counter brands from Bristol-Myers Squibb sold principally in the US for $660 million in cash. The closing date for the North American product portfolio was August 31, 2005; that for the South American portfolio, September 30, 2005 and for the Europe, Middle East and African portfolio, January 6, 2006 with the results consolidated into the OTC Business Unit of our Consumer Health Division from these dates.

Acquisitions 2004

On June 30, we acquired 100% of the shares of the Danish generics company Durascan A/S (now re-named Sandoz A/S) from AstraZeneca. We recorded goodwill of $23 million on this transaction.

On August 13, we completed the acquisition of 100% of the shares of Sabex Inc. (now re-named Sandoz Canada Inc), a Canadian generic pharmaceutical manufacturer with a leading position in generic injectables, for $565 million in cash. We recorded goodwill of $314 million on this transaction.

On February 13, we completed the acquisition of Mead Johnson & Company's global adult medical nutrition business for $385 million in cash. These activities are included in the consolidated financial statements from that date with $220 million of net sales and a $31 million operating loss being recorded in 2004. We recorded goodwill of $183 million on this transaction.

EFFECTS OF CURRENCY FLUCTUATIONS

We transact our business in many currencies other than the US dollar, our reporting currency. In 2006, 45% of our net sales were made in US dollar, 26% in euro, 6% in Japanese yen, 2% in Swiss franc and 21% in other currencies. During the same period, 39% of our expenses arose in US dollar, 24% in euro, 16% in Swiss franc, 5% in Japanese yen and 16% in other currencies. As a result, our business is affected by fluctuations in the exchange rates between these different currencies.

In 2005, 42% of our net sales were generated in US dollar, 27% in euro, 2% in Swiss franc, 8% in yen and 21% in other currencies. During the same period, 34% of our operating costs were generated in US dollar, 26% in euro, 16% in Swiss franc, 5% in yen, and 19% in other currencies

In 2004, 43% of net sales were generated in US dollar, 26% in euro, 3% in Swiss franc, 8% in yen and 20% in other currencies. During the same period, 37% of operating costs were generated in US dollar, 23% in euro, 15% in Swiss franc, 5% in yen, and 20% in other currencies.

Because we prepare our financial statements in US dollars, fluctuations in the exchange rates between the US dollar and other currencies may have an effect both on our results of operations and on the reported value of our assets, liabilities, revenue and expenses as measured in US dollars, which in turn may significantly affect reported earnings (both positively and negatively) and the comparability of period-to-period results of operations.

For purposes of our consolidated balance sheets, we translate non-US dollar denominated equity items into US dollars at historical exchange rates and all other non-US dollar denominated assets and liabilities into US dollars at the exchange rates prevailing in the market as of the relevant balance sheet date. For purposes of our consolidated income statements, non-US dollar revenue and expense items are translated into US dollars at average exchange rates prevailing during the relevant period. Consequently, even if the amounts or values of these items remain unchanged in the respective currency, changes in exchange rates have an impact on the amounts or values of such items in our consolidated financial statements.

We seek to minimize our currency exposure by engaging in hedging transactions where our Management deems it appropriate to do so. For 2006, we entered into various contracts that change in value as foreign exchange rates change to preserve the value of assets, commitments and anticipated transactions. We also use forward contracts and foreign currency options to hedge certain anticipated net revenues in foreign currencies. For more information on how these transactions affect our consolidated financial statements and on how we manage our foreign exchange rate exposure, see also "Item 18. Financial Statements note 1 Derivative financial instruments and hedging" and " note 5" and " note 15."

The average exchange rates between the US dollar and other important currencies for Novartis have remained relatively stable over the past three years as shown by the following table which sets forth the foreign exchange rates of the US dollar against the euro, the Swiss franc and the Japanese yen, respectively, that were used for foreign currency translation when preparing our consolidated income statements.

	2006		2005		2004	
Rates in units per $	**Year end**	**Average for year**	**Year end**	**Average for year**	**Year end**	**Average for year**
EUR	1.317	1.256	1.186	1.245	1.362	1.243
CHF	0.819	0.798	0.762	0.804	0.881	0.805
JPY (100)	0.841	0.860	0.851	0.910	0.964	0.926

As a result, currency fluctuations have not had a significant effect on the comparability of our results of operation over the periods under review, as shown by the following table:

Currency impact on key figures

	Local Currencies Growth in % 2006	**Local Currencies Growth in % 2005**	**$ Growth in % 2006**	**$ Growth in % 2005**
Group net sales	**14**	13	**15**	14
Group operating income	**19**	10	**18**	10
Group net income	**18**	10	**17**	10

For additional information on the effects of currency fluctuations see "Item 11. Quantitative and Qualitative Disclosures about Non-Product-Related Market Risk."

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our principal accounting policies are set out in "Item 18. Financial Statements note 1" and conform to International Financial Reporting Standards. As a result of uncertainties inherent in our business activities, we need to make certain estimates and assumptions that require we make difficult, subjective and complex judgments. Because of uncertainties inherent in such judgments, actual outcomes and results may differ from our assumptions and estimates. Application of the following accounting policies requires certain assumptions and estimates that have the potential for the most significant impact on our consolidated financial statements.

Revenue

We recognize product sales when title and risk and rewards for the products are transferred to the customer, price is fixed and determinable, and collectability is reasonably assured. At the time of the sale,

we also record estimates for a variety of sales deductions, including rebates, discounts and incentives, and product returns. Sales deductions are reported as a reduction of revenue.

Deductions from Revenues

As is typical in the pharmaceutical industry, our gross sales are subject to various deductions, primarily comprised of rebates and discounts to retail customers, government agencies, wholesalers and managed healthcare organizations. These deductions represent estimates of the related obligations, requiring the use of judgment when estimating the impact of these sales deductions on gross sales for a reporting period. We report these adjustments as a reduction of Gross Sales to arrive at Net Sales.

The following briefly describes the nature of each deduction and how the deduction is estimated. The US market has the most complex arrangements related to revenue deductions. Specific reference is therefore made to the US market and where applicable to our Pharmaceuticals Division's primary US operating unit, Novartis Pharmaceuticals Corporation (NPC). However, in a number of countries outside the US, including major European countries, we provide rebates to government entities. These rebates are often legislatively mandated.

The US Medicaid program is a state government administered program that uses state and federal funds to provide assistance to certain vulnerable and needy individuals and families. In 1990, the Medicaid Drug Rebate Program was established to reduce state and federal expenditures for prescription drugs. Under the rebate program, we have signed an agreement to provide a rebate on drugs paid for by a state. We calculate provisions for estimating Medicaid rebates using a combination of historical experience, product and population growth, price increases, the impact of contracting strategies and specific terms in the individual state agreements. We adjust these provisions based upon the established processes for re-filing data with the individual states. For Medicaid, the calculation of rebates involves interpretation of relevant regulations, which are subject to challenge or change in interpretative guidance by government authorities. Since Medicaid rebate claims are typically submitted up to six months after the products are dispensed to patients, any rebate adjustments may involve revisions of provisions for several periods.

On January 1, 2006, an additional prescription drug benefit was added to the US Medicare program which funds healthcare benefits to individuals over the age of 65. Individuals that previously had dual Medicaid/Medicare drug benefit eligibility had their Medicaid prescription drug coverage replaced on January 1, 2006, by the new Medicare Part D coverage, provided through private prescription drug plans. The change led to a significant shift of plan participants between programs in which our US subsidiaries participate. We calculate provisions for estimating Medicare Part D rebates using a combination of specific terms of individual plan agreements, product and population growth, price increases and the impact of contracting strategies.

Our subsidiaries in the US participate in prescription drug savings programs (industry and government sponsored) that offer savings to eligible patients. These savings vary based on a patient's current drug coverage and personal income levels. Provisions for our subsidiaries' obligations under these programs are based on historical experience, trend analysis and current program terms. The introduction of Medicare Part D has reduced the materiality of these programs.

Wholesaler chargebacks relate to contractual arrangements that certain of our subsidiaries have with several indirect customers in the US to sell products at prices that are lower than the list price charged to wholesalers. A wholesaler chargeback represents the difference between the invoice price to the wholesaler and the indirect customer's contract discount price. We calculate provisions for estimated chargebacks using a combination of factors such as historical experience, product growth rates and the specific terms in each agreement. Wholesaler chargebacks are generally settled within one to three months of incurring the liability by reducing accounts receivable.

We offer customer rebates to key managed healthcare plans, group purchasing organizations and other direct and indirect customers to sustain and increase our product market share. These rebate programs provide that the customer receive a rebate after attaining certain performance parameters relating to product purchases, formulary status and/or pre-established market share milestones relative to competitors. Since rebates are contractually agreed upon, we estimate rebates based on the specific terms in each agreement, historical experience, anticipated reimbursement channel mix and product growth rates. We consider the sales performance of products subject to managed healthcare rebates and other contract discounts and adjust the provision periodically to reflect actual experience.

In order to evaluate the adequacy of ending provision balances, we use both internal and external estimates of the level of inventory in the distribution channel and of the rebate claims processing lag time. External data sources include periodic reports of wholesalers and third party market data which we purchase. We estimate the inventory level in the retail channel and in transit.

When we sell a product which the customer has the right to return, we record a provision for estimated sales returns, which we estimate through a comparison of historical return data to related sales. We also consider other factors such as product recalls and, in the case of NPC in the US, introductions of generic products. In the US, we use historical rates of return and we adjust for known or expected changes in the marketplace when appropriate. Sales returns amount to approximately 1% of gross product sales.

Our policy relating to supply of pharmaceuticals products is to adjust shipping patterns in order to maintain customer inventories that are consistent with underlying patient demand. A process exists at NPC to monitor on a monthly basis inventory levels at wholesalers based on the gross sales volume, prescription volumes based on third party data and information received from the key wholesalers. Based on this information, the inventories on hand at wholesalers and other distribution channels in the US as of December 31, 2006 were estimated to be approximately one month. We believe the third party data sources of information are sufficiently reliable, however the accuracy of some data sources cannot be verified.

During 2006, NPC finalized fee-for-service agreements with certain US pharmaceutical wholesalers. These agreements cover items such as product returns, timing of payment, processing of chargebacks, provision of inventory data and the quantity of inventory held by the respective wholesaler. These agreements provide a financial disincentive for these wholesalers to purchase quantities of product in excess of what is necessary to meet current demand and should help to create a more efficient pharmaceutical supply chain.

We offer cash discounts to customers in the US and certain other countries to encourage prompt payment. We accrue cash discounts, which in the US are typically 2% of gross sales, at the time of invoicing and are recorded as revenue deductions.

We generally grant shelf-stock adjustments to customers, based on each customer's existing inventory, following decreases in the invoice or contract price of the related product. Provisions for shelf-stock adjustments, which are primarily relevant within our Sandoz Division, are determined at the time of the price decline or at the point of sale if a price decline is reasonably estimable and are based on estimated inventory levels.

We also offer other sales discounts such as consumer coupons and discount cards. We record these discounts at the time of sales, or when the coupon is issued and they are estimated utilizing historical experience and the specific terms for each program.

We generally record discounts, rebates or other deductions shown on the invoice directly as a reduction in the gross to net sales value and they do not pass through the provision account.

The following tables show the worldwide extent of revenue deductions, related payment experiences and provisions of Novartis:

Provision for revenue deductions

					Income Statement charge			
	Provisions offset against gross trade accounts receivable at January 1, 2006	Provisions at January 1, 2006	Impact of translation and business combinations	Payments/Utilizations	Adjustments of prior years	Current year	Provisions offset against gross trade accounts receivable at December 31, 2006	Provisions at December 31, 2006
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
US Medicaid, Medicare and State program rebates & credits including prescription drug saving cards		497		(643)	(35)	719		538
US managed healthcare rebates		256		(457)	(5)	441		235
Other healthcare plans & programs (non US) rebates		35	6	(108)	2	141		76
Chargebacks including hospital chargebacks	379		7	(2,340)	(3)	2,286	329	
Direct discounts, cash discounts & other rebates	256	66	89	(989)	(22)	981	273	108
Sales returns & other deductions		408	43	(579)	(13)	612		471
Total	**635**	**1,262**	**145**	**(5,116)**	**(76)**	**5,180**	**602**	**1,428**

Gross to Net sales reconciliation

	Income Statement charge				
	Charged through revenue deductions provisions 2006	Charged directly without being recorded in revenue deductions provisions 2006	Total 2006	In % of 2006 gross sales	In % of 2005 gross sales
	($ millions)	($ millions)	($ millions)		
Group gross sales subject to deductions			**44,844**	**100.0**	**100.0**
US Medicaid & Medicare and State program rebates & credits including prescription drug saving cards	(684)	(28)	(712)	(1.6)	(2.0)
US managed healthcare rebates	(436)		(436)	(1.0)	(1.3)
Other healthcare plans & programs (non US) rebates	(143)	(83)	(226)	(0.5)	(0.2)

	Income Statement charge				
Chargebacks including hospital chargebacks	(2,283)	(119)	(2,402)	(5.4)	(4.6)
Direct discounts, cash discounts & other rebates	(960)	(2,022)	(2,982)	(6.5)	(5.9)
Sales returns & other deductions	(598)	(468)	(1,066)	(2.4)	(3.0)
Total gross to net sales adjustments	**(5,104)**	**(2,720)**	**(7,824)**	**(17.4)**	**(17.0)**
Group net sales			**37,020**	**82.6**	**83.0**

Acquisition accounting

Our consolidated financial statements and results of operations reflect an acquired business after the completion of the acquisition. We account for the acquired businesses using the purchase method of accounting which requires that the assets acquired and liabilities assumed be recorded at the date of acquisition at their respective fair values. Any excess of the purchase price over the estimated fair values of the net assets acquired is recorded as goodwill in the balance sheet and is denominated in the local currency of the related acquisition. Goodwill is allocated to operations using a concept which requires that we define appropriate cash-generating units. Under IFRS 3 *Business Combinations*, In-Process Research & Development (IPR&D) is valued as part of the process of allocating the purchase price in a new business combination. This amount needs to be recorded separately from goodwill and is allocated to cash-generating units and must be assessed for impairment on an annual basis. Under IAS 38 (revised) *Intangible Assets*, acquired assets in development, such as those related to initial and milestone payments on licensed or acquired compounds are capitalized as intangible assets, even if uncertainties exist as to whether the R&D will ultimately be successful in producing a saleable product. The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can materially impact our results of operations. Accordingly, for significant acquisitions, we obtain assistance from third party valuation specialists. The valuations are based on information available at the acquisition date and are based on expectations and assumptions that we have deemed reasonable.

Impairment of long-lived assets

We regularly review long-lived assets including identifiable intangible assets and goodwill 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, we make estimates of the future cash flows we expect will result from the use of the asset and its eventual disposal.

We consider all goodwill to have an indefinite life, which is subject to at least annual impairment testing. Any goodwill impairment charge is recorded in the income statement under Other Income and Expense. We also assess IPR&D for impairment on an annual basis and any impairment charge is recorded in Research & Development expenses. Once a project included in IPR&D has been successfully developed and is available for use, we record the amortization over its useful life into Cost of Goods Sold where any related impairment charge is also recorded. We review other long-lived assets when there is an indication that an impairment may have occurred.

If the balance sheet carrying amount of the asset exceeds the higher of its value in use or our anticipated fair value less cost of sale, we will recognize an impairment loss for the difference. There are several methods that can be used to determine the fair value of assets. For intangible assets, including IPR&D or product and marketing rights, we typically use the discounted cash flow method. This method starts with a forecast of all expected future net cash flows. We then adjust these cash flows to present value by applying an appropriate discount rate that reflects the risks and uncertainties associated with the forecasted cash flow streams. Actual outcomes could vary significantly from our forecasted future cash flows. The development of discounted future cash flows, in particular for IPR&D, involves highly sensitive estimates and assumptions specific to the nature of our activities with regard to:

The amount and timing of projected future cash flows;

The discount rate selected to measure the risks inherent in the future cash flows;

The outcome of research and development activities (compound efficacy, results of clinical trials, etc.);

The amount and timing of projected costs to develop the IPR&D into commercially viable products;

The probability of obtaining regulatory approval;

Long-term sales forecasts for periods up to 20 years;

Selling price erosion rates after end of patent protection and entry of generic competition:

The behavior of competitors (launch of competing products, marketing initiatives, etc.).

Factors that could result in shortened useful lives or impairment include lower than anticipated sales for acquired products; or for sales associated with patents and trademarks; or lower than anticipated future sales resulting from acquired research and development; or the closing of facilities; or changes in the planned use of buildings, machinery or equipment. Changes in the discount rates used for these calculations also could lead to impairments. Additional information on the US GAAP carrying values of trademarks, product and marketing rights is presented in "Item 18. Financial Statements note 33.5."

We have adopted a uniform method for assessing goodwill for impairment and any other intangible asset indicated as possibly impaired. If no cash flow projections for the whole useful life of an intangible asset are available, we utilize cash flow projections for the next 5 years based on our range of forecasts with a terminal value using sales projections usually in line or lower than inflation thereafter. Typically we use three probability-weighted scenarios.

The discount rates we use are based on our weighted average cost of capital adjusted for specific country and currency risks associated with the cash flow projections. Since the cash flows also take into account tax expenses we use a post-tax discount rate.

We usually base the recoverable amount of a cash-generating unit and related goodwill on the value in use which we derive from applying discounted future cash flows using the key assumptions indicated below:

	Pharmaceuticals	Vaccines and Diagnostics	Sandoz	Consumer Health
	%	%	%	%
Sales growth rate assumptions after forecast period	[1]	[2]	(1) to 6	(2) to 3
Discount rate	7 to 9	[2]	8 to 10	9 to 10

[1] Forecast period covers useful life.

[2] No value in use analysis performed as newly acquired and no indication of impairment.

In 2006, we recorded impairment charges of $126 million, principally relating to capitalized milestone payments in the Pharmaceuticals Division and marketed products in our Sandoz Division. In 2005, we recorded impairment charges of $401 million, principally relating to the impairment of NKS 104 marketing rights in our Pharmaceuticals Division of $332 million and $37 million of IPR&D in our Sandoz Division. In 2004, we recorded impairment charges of $87 million, principally related to the over-valuation on an economic basis of our Sandoz Division activities in Germany.

The amount of goodwill and other intangible assets on our consolidated balance sheet has increased significantly in recent years, primarily as a result of our recent acquisitions. Although we do not currently have an indication of any significant additional impairments, impairment testing under IFRS 3 may lead to further impairment charges in the future. For more information, see "Item 18. Financial Statements note 9."

Investments in associated companies

We have investments in associated companies (defined as investments in companies that correspond to holdings of between 20% and 50% of a company's voting shares or over which it otherwise has significant influence) which we account for by using the equity method. Due to the various estimates that have been made in applying the equity method, the amounts recorded in our consolidated financial

statements in respect to the investment in Roche Holding AG may require adjustments in the following year after more financial and other information becomes publicly available.

Retirement and other post-employment benefit plans

We sponsor pension and other retirement plans in various forms covering associates who meet eligibility requirements. These plans cover a significant number of our associates. Several statistical and other factors that attempt to anticipate future events are used in calculating the expense and liability related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases, as determined by our management within certain guidelines. In addition, our actuarial consultants use statistical information such as withdrawal and mortality rates for their estimates. The actuarial assumptions used may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. We record differences between assumed and actual income and expense as gains or losses in our Statement of Recognized Income and Expense. The differences could have a significant impact on our total equity. For more detail on our obligations under retirement and other post-employment benefit plans and the underlying actuarial assumptions, see "Item 18. Financial Statements note 26.1."

Equity-based compensation

We recognize the fair value of the Novartis shares, Novartis American Depositary Shares and related options granted to associates as compensation as an expense. We calculate the fair value of the options at the grant date using the trinomial valuation method, which is a variant of the lattice binomial approach. Accurately measuring the value of share options granted to associates is difficult and requires us to make estimates of certain factors. The key factors involve an estimate of future uncertain events amongst others, the expected term of the option, the expected share price volatility factor and the expected dividend yield. Shares and ADSs are valued using the market value on the grant date. We charge the amounts for options and other share-based compensation to income over the relevant vesting or service periods, adjusted to reflect actual and expected levels of vesting. The charge for share-based compensation is included in the personnel expenses of the various subsidiaries where the associates are employed. For detailed information on our equity-based compensation plans and on the assumptions on which the valuation of share options granted to associates was based for 2006, see "Item 18. Financial Statements note 27."

Contingencies and environmental liabilities

A number of our entities are involved in various intellectual property, product liability, commercial, employment and wrongful discharge, environmental and tax litigations and claims, government investigations and other legal proceedings arising out of the normal conduct of their businesses. See "Item 18. Financial Statements note 19" for further detail.

We record accruals for contingencies when it is probable that a liability has been incurred and the amount can be reasonably estimated. We adjust these accruals periodically as assessments change or additional information becomes available. For product liability claims, a portion of the overall accrual is actuarially determined and considers such factors as past experience, amount and number of claims reported and estimates of claims incurred but not yet reported. We provide for individually significant cases when probable and reasonably estimable. We accrue legal defense costs expected to be incurred in connection with a loss contingency when probable and reasonably estimable.

We record provisions for non-recurring environmental remediation costs when expenditure on remedial work is probable and the cost can be reliably estimated. Cost of future expenditure does not reflect any insurance or other claims or recoveries, as we only recognize insurance or other recoveries at such time as the amount is reasonably estimable and collection is virtually certain. Recurring remediation costs are provided under non-current liabilities and are estimated by calculating the discounted amounts of such annual costs for the next 30 years.

New Accounting Pronouncements

See "Item 18. Financial Statements note 33.14(ii)" for a discussion of the effect of new accounting standards.

SEGMENT REPORTING

We are divided on a worldwide basis into four operating divisions (Pharmaceuticals, Vaccines and Diagnostics, Sandoz, Consumer Health) and Corporate activities. Our four operating divisions are based on our internal structure. They are managed separately because they each manufacture, distribute and sell distinct products that require differing marketing strategies.

Inter-divisional sales are made at amounts considered to approximate arm's-length transactions. The accounting policies of the divisions are the same as those of the Group. The Group principally evaluates divisional performance and allocates resources based on operating income.

Pharmaceuticals Division

Our Pharmaceuticals Division researches, develops, manufactures, distributes, and sells branded pharmaceuticals in the following therapeutic areas: cardiovascular and metabolism; oncology and hematology; neuroscience; respiratory and dermatology; infectious diseases, transplantation and immunology; arthritis, bone, gastrointestinal and urinary; and ophthalmics. Our Pharmaceuticals Division is organized into global business franchises responsible for the marketing of various products as well as a Business Unit called Novartis Oncology responsible for the global development and marketing of oncology products. The Oncology Business Unit is not required to be separately disclosed as a segment, since it shares common long-term economic perspectives, customers, research, development, production, distribution and regulatory environments with the remainder of the Pharmaceuticals Division. Our Pharmaceuticals Division is the most important division, accounting in 2006 for $22.6 billion, or 61%, of Group net sales and for $6.7 billion, or 82%, of Group operating income.

Vaccines and Diagnostics Division

Our Vaccines and Diagnostics Division is a new division focused on the development of preventive vaccine treatments and diagnostic tools. It was formed in April 2006 following the acquisition of the remaining stake in Chiron Corporation not already held by Novartis. The division has two activities: Novartis Vaccines and Chiron. Novartis Vaccines is the world's fifth-largest vaccines manufacturer of vaccines and the second-largest supplier of influenza vaccines in the US. Key products also include meningococcal, pediatric and travel vaccines. Chiron is a blood testing and molecular diagnostics activity dedicated to preventing the spread of infectious diseases through the development of novel blood-screening tools that protect the world's blood supply. In 2006, our Vaccines and Diagnostics Division accounted for $956 million, or 3% of Group net sales, and produced a $26 million operating loss.

Sandoz Division

Our Sandoz Division is a leading global generic pharmaceuticals company that develops, produces and markets drugs along with pharmaceutical and biotechnological active substances. Through Sandoz, Novartis is the only major pharmaceutical company to have leadership positions in both patented prescription drugs as well as generic pharmaceuticals. Our Sandoz Division maintains a Retail Generics activity and an Anti-Infectives activity. In Retail Generics, Sandoz develops and manufactures active ingredients and finished dosage forms that are no longer covered by patents. Retail Generics includes the development and manufacture of biopharmaceuticals. Retail Generics also supplies certain active ingredients to third parties. In Anti-Infectives, Sandoz develops and manufactures off-patent active pharmaceutical ingredients and intermediates, mainly antibiotics, for internal use by Retail Generics and for sale to third-party customers. Sandoz offers some 840 compounds in over 5,000 forms in 110 countries. The most important product groups include antibiotics, treatments for central nervous system disorders,

gastrointestinal medicines, cardiovascular treatments and hormone therapies. Sandoz is our third largest division, both in terms of Group net sales and operating income. In 2006, our Sandoz Division accounted for $6.0 billion, or 16%, of Group net sales and for $736 million, or 9%, of Group operating income.

Consumer Health Division

Our Consumer Health Division consists of the following four Business Units: OTC (over-the-counter medicines), Animal Health, Gerber and CIBA Vision. Each has manufacturing, distribution and selling capabilities. However, none are material enough to the Group to be separately disclosed as a segment. The OTC Business Unit covers over-the-counter self medications. The Animal Health Business Unit covers veterinary products for farm and companion animals. The Gerber Business Unit covers foods as well as other products and services designed to serve the particular needs of babies and infants. The CIBA Vision Business Unit covers contact lenses, lens care products, and ophthalmic products.

Our Medical Nutrition Business Unit was previously included in our Consumer Health Division, but has been classified as a discontinuing operation as a consequence of announcements during 2006 to divest the activities of this Business Unit. For more detail, see "Factors Affecting Results of Operations Acquisitions and Divestments" above. The Medical Nutrition Business Unit covers health and medical nutrition products.

In 2006, our Consumer Health Division (excluding discontinuing operations) was our second largest division, both in terms of Group net sales and operating income and accounted for $6.5 billion, or 18%, of Group net sales and for $1.1 billion, or 13%, of Group operating income.

Corporate

Income and expenses relating to Corporate include the costs of the Group headquarters and those of corporate coordination functions in major countries. In addition, Corporate includes certain items of income and expense that are not attributable to specific divisions. No allocation of Corporate items is usually made to the divisions.

FACTORS AFFECTING COMPARABILITY OF YEAR-ON-YEAR RESULTS OF OPERATIONS

Recent Acquisitions and Divestments

The comparability of the year-on-year results of operations for the Group was significantly affected by a number of significant acquisitions and divestments during 2006, 2005 and 2004. For more detail on these acquisitions and divestments and how they have affected the Group's results, see " Factors Affecting Results of Operations Acquisitions and Divestments" above.

Divestment of Medical Nutrition Business Unit

The results of our Medical Nutrition Business Unit of our Consumer Health Division are reported as discontinuing operations for 2006, 2005 and 2004 in our consolidated financial statements. As a result, the divestment of our Medical Nutrition Business Unit does not affect the comparability of year-on-year results of operations on a continuing operations basis, either for the Group or for the Consumer Health Division.

Currency Fluctuations

Despite movements in the exchange rate of the US dollar, our reporting currency, compared to major currencies, currency fluctuations have not had a significant effect on the comparability of our results of operations for 2006, 2005 and 2004. For more information, see " Effects of Currency Fluctuations" above.

2004 Pro Forma Consolidated Financial Information

We adopted a number of new International Financial Reporting Standards as of January 1, 2005. Certain of these new Standards did not require the retrospective application of new accounting and reporting requirements.

In order to assist our investors and analysts in their understanding of our results by having comparable information, we have provided 2004 pro forma consolidated income and cash flow statements that include the following additional adjustments compared to the 2004 consolidated income and cash flow statements. The discussion on income statement and cash flow items in this Operating and Financial Review principally compares 2005 with 2004 pro forma financial information.

The following describes in detail the 2004 pro forma adjustments:

IFRS 2 (Share-based compensation)

As permitted by IFRS 2, our 2004 audited consolidated financial statements reflect the cost of grants awarded only since November 7, 2002, whereas the pro forma income statements include prior grants that would have had an impact on our 2004 results had there been further retrospective restatements.

IFRS 3 (Business combinations)

IFRS 3 requires non-amortization of goodwill arising from pre-March 31, 2004 business combinations only from January 1, 2005. The pro forma income statements exclude all goodwill amortization in 2004.

IAS 38 (Intangible assets)

IAS 38 (revised) requires that acquired R&D assets, such as those related to initial and milestone payments, be capitalized as intangible assets from January 1, 2005 even if uncertainties exist as to whether the R&D will ultimately be successful in producing a saleable product. The pro forma income and cash flow statements adopt this policy for all of 2004.

The following tables show the adjustments we have made to our audited 2004 consolidated income and cash flow statements in preparing the 2004 pro forma financial information:

2004 Pro Forma Consolidated Income Statement

	Note	2004	Adjustments	2004 Pro Forma
		($ millions)	($ millions)	($ millions)
Net sales from continuing operations		**27,126**		**27,126**
Other revenues		151		151
Cost of goods sold		(6,700)		(6,700)
Marketing & sales		(8,503)		(8,503)
Research & development	1	(4,152)	94	(4,058)
General & administration		(1,486)		(1,486)
Other income & expense	2	(319)	32	(287)
Operating income from continuing operations		**6,117**	**126**	**6,243**
Income from associated companies	3	68	109	177
Financial income		486	2	488
Interest expense		(261)		(261)
Income from continuing operations before taxes		**6,410**	**237**	**6,647**
Taxes	4	(1,045)	(27)	(1,072)
Net income from continuing operations		**5,365**	**210**	**5,575**
Net income from discontinuing operations		15	11	26
Group net income		**5,380**	**221**	**5,601**
Attributable to				
Shareholders of Novartis AG		*5,365*	*221*	*5,586*
Minority interests		*15*		*15*
EPS ($)	5	**2.28**	**0.09**	**2.37**

2004 Pro Forma Consolidated Cash Flow Statement

		Year ended December 31,		
	Note	2004	Adjustments	2004 Pro Forma
		($ millions)	($ millions)	($ millions)
Cash flow from operating activities from continuing operations	6	6,564	94	6,658
Cash flow used for investing activities from continuing operations	6	(2,816)	(94)	(2,910)
Cash flow used for financing activities from continuing operations		(2,998)		(2,998)

	Year ended December 31,		
Cash flow from discontinuing operations	(369)		(369)
Translation effect on cash and cash equivalents	56		56
Net change in cash and cash equivalents of continuing operations	**437**		**437**

Notes to 2004 Pro Forma Consolidated Financial Information

1. In 2004, $94 million reduction in expense from capitalization of previously expensed acquired R&D intangible assets in our Pharmaceuticals Division.

2. In 2004, $84 million reduction in expense from ending goodwill amortization, $1 million reduction in expense due to consolidation of our employee share participation foundation and a $53 million increase in expense from share-based compensation, resulting in a net $32 million reduction in expense.

3. Impact of 2 above and 4 below on result from associated companies.

4. Tax effect of pro forma adjustments.

5. Impact of pro forma adjustments on EPS.

6. Under IAS 38 (revised) acquired R&D assets need to be capitalized as intangible assets. The 2004 pro forma consolidated cash flow statements includes the reclassification of $94 million for capitalized R&D payments to cash flow used for investing activities.

RESULTS OF OPERATIONS

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

	2006	2005	2004 Pro Forma
	($ millions)	($ millions)	($ millions)
Net sales from continuing operations			
Pharmaceuticals	**22,576**	**20,262**	**18,497**
Vaccines and Diagnostics	**956**		
Sandoz	**5,959**	**4,694**	**3,045**
Consumer Health	**6,540**	**6,049**	**5,584**
Net sales from continuing operations	**36,031**	**31,005**	**27,126**
Other revenues	718	314	151
Cost of Goods Sold	(10,299)	(8,259)	(6,700)
Marketing & Sales	(10,454)	(9,397)	(8,503)
Research & Development	(5,349)	(4,825)	(4,058)
General & Administration	(1,957)	(1,681)	(1,486)
Other income & expense	(741)	(355)	(287)
Operating income from continuing operations	**7,949**	**6,802**	**6,243**
Operating income from continuing operations by Division			
Pharmaceuticals	**6,703**	**6,014**	**5,366**
Vaccines and Diagnostics	**(26)**		
Sandoz	**736**	**342**	**263**
Consumer Health	**1,068**	**952**	**960**
Corporate income and expense, net	(532)	(506)	(346)
Operating income from continuing operations	**7,949**	**6,802**	**6,243**
Income from associated companies	264	193	177
Financial income	354	461	488
Interest expense	(266)	(294)	(261)
Taxes	(1,282)	(1,090)	(1,072)
Net income from continuing operations	**7,019**	**6,072**	**5,575**
Net income from discontinuing operations	183	69	26

	2006	2005	2004 Pro Forma
Group net income	**7,202**	**6,141**	**5,601**
Attributable to:			
Shareholders of Novartis AG	*7,175*	*6,130*	*5,586*
Minority interests	*27*	*11*	*15*
	104		

2006 Compared to 2005

The following compares our results for the year ended December 31, 2006 to those for the year ended December 31, 2005. Our analysis is divided as follows:

1. *Group Overview*
2. *Net Sales by Division*
3. *Other Revenues and Operating Expenses*
4. *Operating Income by Division*
5. *Net Income*

1. Group Overview

Our Group net sales increased 15% in 2006 to $37.0 billion. All divisions delivered strong performances due to a mixture of organic growth and contributions from acquisitions. Higher sales volumes added six percentage points to our Group net sales growth and acquisitions seven percentage points. Net price changes and currency translation had a positive impact of one percentage point each. Pharmaceuticals accounted for 63% of net sales from continuing operations, Vaccines and Diagnostics for 3%, Sandoz for 16% and Consumer Health 18%. The results of the Medical Nutrition Business Unit for 2006 and prior years are shown as discontinuing operations in this financial report following decisions in 2006 to divest this business. The US remained our largest market, representing 41% of Group net sales, Europe for 37% and the rest of the world for 22%.

Our Group operating income advanced 18% to $8.2 billion despite Chiron acquisition-related costs of $642 million. Excluding these, our Group operating income increased by 28%. Operating income from continuing operations advanced 17%, at a rate higher than sales as productivity improvements and the strong sales volume expansion more than offset one-time costs related to acquisitions. Cost of Goods Sold rose 25% and increased as a percentage of net sales to 28.6%, mainly reflecting the impact of purchase price accounting and increased amortization of intangible assets from acquisitions. Marketing & Sales fell 1.3 percentage points to 29.0% of net sales primarily due to productivity improvements in our Pharmaceuticals Division. Research & Development expenses rose 11% as we continued to have one of the industry's highest R&D investment rates at 14.8% of our net sales and 18.9% of our Pharmaceuticals Division net sales.

Our Group operating margin, defined as our operating income as a percentage of our net sales, increased to 22.1% from 21.4% in 2005, as underlying operating improvements were only partially offset by one-time acquisition-related costs. The operating margin from continuing operations increased to 22.1% from 21.9% in 2005.

Our Group net income rose 17% to $7.2 billion. Excluding the impact on our Group net income of Chiron acquisition-related costs of $451 million it would have increased 25%. Net income from continuing operations increased 16% to $7.0 billion as the operating income increase was partially offset by the reduction in financial income. Our earnings per share rose 16% to $3.06 per share from $2.63 in 2005.

2. Net Sales by Division

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

	Year ended December 31,		Change in $	Change in local currencies
	2006	2005		
	($ millions)	($ millions)	(%)	(%)
Net sales				
Pharmaceuticals	**22,576**	**20,262**	**11**	**11**
Vaccines and Diagnostics	**956**			
Sandoz Division	**5,959**	**4,694**	**27**	**25**
Consumer Health	**6,540**	**6,049**	**8**	**8**
Net sales from continuing operations	**36,031**	**31,005**	**16**	**16**
Net sales from discontinuing operations	989	1,207	(18)	(18)
Group net sales	**37,020**	**32,212**	**15**	**14**

The following table sets forth the gross to net sales reconciliation for each of the periods indicated.

Gross to net sales reconciliation

	Total 2006	In % of 2006 gross sales	Total 2005	In % of 2005 gross sales
	($ millions)		($ millions)	
Group gross sales subject to deductions	**44,844**	**100.0**	**38,844**	**100.0**
US Medicaid and Medicare and State program rebates and credits including prescriptions drug savings card	(712)	(1.6)	(794)	(2.0)
US managed healthcare rebates	(436)	(1.0)	(498)	(1.3)
Other healthcare plans & programs (non-US) rebates	(226)	(0.5)	(96)	(0.2)
Chargebacks (including hospitals)	(2,402)	(5.4)	(1,782)	(4.6)
Direct customer discounts, cash discounts and other rebates	(2,982)	(6.5)	(2,290)	(5.9)
Sales returns and other deductions	(1,066)	(2.4)	(1,172)	(3.0)
Total gross to net sales adjustments	**(7,824)**	**(17.4)**	**(6,632)**	**(17.0)**
Group net sales	**37,020**	**82.6**	**32,212**	**83.0**

In 2006, the percentage of deductions from gross sales practically remained unchanged from 2005.

Pharmaceuticals Division

Strong net sales growth of 11% in local currencies (lc) was driven by dynamic performances from leading brands that have made Novartis a leader in its Cardiovascular, Oncology and Neuroscience franchises. Four products *Diovan, Gleevec/Glivec, Lotrel* and *Zometa* each achieved sales of more than $1 billion in 2006. Cardiovascular strategic brand sales were up 15% (+15% lc) to $6.5 billion as the leading hypertension medicines *Diovan* (+15% lc), which recorded sales exceeding $4.2 billion, and *Lotrel*

106

(+26% lc) each gained market share, while the anti-cancer drugs *Gleevec/Glivec* (+17% lc), which surpassed $2.5 billion in sales, and *Femara* (+33% lc) led the 16% (+15% lc) rise in Oncology net sales to $5.9 billion.

In the US, net sales rose 17% to $9.5 billion, led by excellent performances from *Diovan* (+20%), *Gleevec/Glivec* (+20%), *Lotrel* (+26%) and *Zelnorm/Zelmac* (+37%). Net sales in Europe were up 8% (+7% lc) as strong performances from the leading products *Diovan, Gleevec/Glivec* and *Femara*, as well as dynamic growth in the emerging European growth markets of Russia and Turkey, were partially offset by healthcare pricing pressure and generic competition for some products, particularly in France and Germany. Latin America delivered a strong expansion thanks to good performances from Brazil and Mexico, with sales in the region up 21% (+17% lc).

Chiron's pharmaceuticals business, acquired in mid-2006, added two percentage points to net sales growth in local currencies. Volume increases added six percentage points. Price increases added three percentage points. The impact of currencies on the Pharmaceutical Division's net sales was immaterial.

Pharmaceuticals Division key product highlights

Note: All growth figures refer to 2006 worldwide sales growth in local currencies.

Top 20 Pharmaceutical Division Product Net Sales 2006

Brands	Therapeutic Area	United States	% change in local currencies	Rest of the World	% change in local currencies	Total	% change in $	% change in local currencies
		($ millions)		($ millions)		($ millions)		
Diovan/Co-Diovan	Hypertension	1,858	20	2,365	12	4,223	15	15
Gleevec/Glivec	Chronic myeloid leukemia/Gastro-intestinal stromal tumors	630	20	1,924	16	2,554	18	17
Lotrel	Hypertension	1,352	26			1,352	26	26
Zometa	Cancer complications	696	(1)	587	12	1,283	5	4
Lamisil (group)	Fungal infections	574	7	404	(31)	978	(14)	(13)
Neoral/Sandimmun	Transplantation	125	(17)	793	(1)	918	(4)	(4)
Sandostatin (incl. LAR)	Acromegaly	367	(2)	548	4	915	2	2
Lescol	Cholesterol reduction	256	0	469	(8)	725	(5)	(5)
Trileptal	Epilepsy	549	19	172	11	721	17	17
Femara	Breast cancer	338	40	381	27	719	34	33
Top ten products		**6,745**	**15**	**7,643**	**7**	**14,388**	**10**	**10**
Voltaren (group)	Inflammation/pain	8	60	682	0	690	0	1
Zelnorm/Zelmac	Irritable bowel syndrome	488	37	73	20	561	34	34
Exelon	Alzheimer's disease	187	9	338	12	525	12	11
Tegretol (incl. CR/XR)	Epilepsy	120	10	271	(5)	391	(1)	(1)
Visudyne	Macular degeneration	70	(62)	284	(6)	354	(27)	(27)
Miacalcic	Osteoporosis	199	(13)	140	3	339	(7)	(7)
Comtan/Stalevo Group	Parkinson's disease	157	18	182	24	339	22	21
Foradil	Asthma	14	0	317	(1)	331	0	(1)
Ritalin/Focalin (group)	Attention deficit/hyperactive disorder	264	47	66	6	330	37	37
Famvir	Viral infections	166	10	102	(3)	268	6	5
Top twenty products		**8,418**	**14**	**10,098**	**5**	**18,516**	**9**	**9**
Rest of portfolio		1,054	43	3,006	14	4,060	21	21
Total		**9,472**	**17**	**13,104**	**7**	**22,576**	**11**	**11**

Diovan ($4.2 billion, +15% lc), the leading angiotensin-receptor blocker by sales worldwide, generated further excellent growth and achieved a record market share in its segment based on new indications, higher-strength doses and strong new efficacy data. In the US, *Diovan* has benefited from a leading formulary position with healthcare payors. *Co-Diovan* (combination with a diuretic) was up 19% lc in Europe, reflecting increasing use of combination therapies.

Gleevec/Glivec ($2.6 billion, +17% lc), a targeted treatment for patients with certain forms of chronic myeloid leukemia (CML) and gastro-intestinal stromal tumors (GIST), continued to expand at a rapid rate through ongoing penetration of the CML and GIST markets. New landmark data showed nearly 90% of CML patients in a five-year study taking *Gleevec/Glivec* were still alive after five years. *Gleevec/Glivec* also received four EU and five US approvals for treating various rare diseases during 2006.

Lotrel ($1.4 billion, +26% only in US), the leading fixed-dose combination treatment for hypertension in the US since 2002, has delivered strong growth based on new dosing strengths as well the increasing use of multiple therapies to treat hypertension, demographic factors and the impact of US disease awareness campaigns.

Zometa ($1.3 billion, +4% lc), an intravenous bisphosphonate for patients with bone cancer, was impacted by an overall slowing of the bisphosphonate segment in the US and Europe. However, *Zometa* has gained market share in treating patients with lung and prostate cancer and also benefited from a launch in Japan.

Lamisil ($978 million, -13% lc), an oral treatment for fungal nail infections, generated higher sales in the US, but this was offset by falling sales in Europe following the entry of generic competition in late 2005. In December 2006, the FDA confirmed the grant of a pediatric extension for *Lamisil* extending its marketing exclusivity through to June 2007.

Neoral/Sandimmun ($918 million, -4% lc), for transplantation, achieved steady sales despite generic competition in many markets.

Sandostatin ($915 million, +2% lc), for certain types of cancer, benefited from double-digit growth of the long-acting patent protected version.

Lescol ($725 million, -5% lc), for cholesterol reduction, maintained sales in the US but suffered a reduction in the rest of the world due to generic competition.

Trileptal ($721 million, +17% lc), against epilepsy, continued to grow significantly in its last year before generic competition is expected.

Femara ($719 million, +33% lc), a leading oral treatment for women with hormone-related breast cancer, was a key growth driver due to ongoing market share gains. Clinical data has confirmed the benefits of use in women after surgery (adjuvant) as well as after completion of tamoxifen therapy (extended adjuvant). Recent four-year data from a major trial confirmed *Femara* significantly reduces the risk of breast cancer returning.

Zelnorm/Zelmac ($561 million, +34% lc), for treatment of irritable bowel syndrome with constipation and chronic idiopathic constipation, has benefited from outstanding US growth due to broader use of the product and ongoing disease awareness programs.

Exelon ($525 million, +11% lc), approved for treatment of mild to moderate Alzheimer's disease as well as dementia related to Parkinson's disease, has expanded sales thanks to greater use in patients with Alzheimer's and its status as the only approved product for the treatment of dementia associated with Parkinson's disease. *Exelon* is now available in over 70 countries.

Visudyne ($354 million, -27% lc), a treatment for the eye disease "wet" age-related macular degeneration, reported a sharp decline in net sales linked to off-label competition in the US and in other key markets, but sales in Japan were higher.

Stalevo/Comtan ($339 million, +21% lc), an enhanced longer-lasting levodopa therapy for the treatment of patients with Parkinson's disease, has generated higher sales following launches in certain European markets as well as ongoing growth in the US.

Ritalin/Focalin ($330 million, +37% lc), for attention-deficit hyperactivity disorder in both adults and children, has been supported by the launch of a higher-dose formulation in the US as well as the launch of *Focalin* (a single isomer version of *Ritalin*) in a number of countries and longer-acting versions that have reduced the need for midday dosing.

Exjade ($143 million), the first once-daily oral iron chelator for chronic iron overload, has performed well since its approval in the US and over 70 countries in 2006 as a new treatment for iron overload associated with blood disorders such as sickle cell anemia, myelodysplastic syndrome and thalassemia.

Xolair ($102 million), for severe allergic asthma, has now been launched in over 20 countries following EU approval in October 2005, with approvals received in over 50 countries. In the US, Novartis co-promotes *Xolair* with Genentech, which distributes it and shares a portion of operating income. *Xolair* had 2006 net sales of $425 million in the US, resulting in a contribution to Novartis of $140 million reported as Other Revenues.

Vaccines and Diagnostics Division

Vaccines and Diagnostics, a new division created following our acquisition of Chiron in April 2006, generated net sales growth of 42% in the eight months since acquisition over the comparable eight month 2005 period recorded by Chiron, mainly from increased seasonal influenza vaccine sales in the US. Sales of diagnostics products, primarily for testing of blood donations, also showed steady growth.

Sandoz Division

Net sales advanced 27% due to new product launches and stronger positions in fast-growing markets, particularly Europe and supported by Hexal AG and Eon Labs, Inc. following their mid-2005 acquisition. These transactions made Sandoz a global leader in generics. Sandoz maintained its leadership position in Germany in tough market conditions marked by price cuts during 2006. Key growth drivers have been differentiation through difficult-to-make generics and innovative product applications, including device technologies. Volume increases contributed seven percentage points to 2006 net sales growth; currency effects two percentage points and acquisition effects 24 percentage points, offset by a decline of six percentage points due to reduced prices.

Consumer Health Division continuing operations

Strong sales expansions in OTC and Animal Health, due to the increasing focus on strategic brands and product innovations underpinned the net sales growth of the continuing operations of 8%. OTC brands acquired from Bristol-Myers Squibb Co. in mid-2005 supported the sales expansion.

Discontinuing Consumer Health Division operations

We announced plans in December to divest the remainder of the Medical Nutrition Business Unit in the Consumer Health Division for $2.5 billion to Nestlé S.A., Switzerland. This follows the sale of the business unit's Nutrition & Santé unit in February 2006. The sale of the remainder of Medical Nutrition, which is subject to customary regulatory approvals, is expected to be completed in the second half of 2007. The financial data for this business unit, including Nutrition & Santé is disclosed in 2005 and 2006 under "Discontinuing operations."

3. Other Revenues and Operating Expenses

	Year ended December 31,		Change in $
	2006	2005	
	($ millions)	($ millions)	(%)
Net sales from continuing operations	**36,031**	**31,005**	**16**
Other revenues	718	314	129
Cost of Goods Sold	(10,299)	(8,259)	25
Marketing & Sales	(10,454)	(9,397)	11
Research & Development	(5,349)	(4,825)	11
General & Administration	(1,957)	(1,681)	16
Other Income & Expense	(741)	(355)	109
Operating income from continuing operations	**7,949**	**6,802**	**17**
Operating income from discontinuing operations	225	103	118
Group operating income	**8,174**	**6,905**	**18**

Other revenues

Other revenues rose 129%, primarily due to additional royalty income arising in the new Vaccines and Diagnostics Division mainly from its diagnostic activities and also increasing co-promotion contributions in the Pharmaceuticals Division from sales of the asthma medicine *Xolair* in the US, where it is co-marketed and co-developed in partnership with Genentech and Tanox.

Cost of Goods Sold from continuing operations

Cost of Goods Sold rose 25% to $10.3 billion in 2006. As a percentage of net sales from continuing operations, Cost of Goods Sold increased to 28.6% compared to 26.6% in 2005. The negative impact of increased amortization charges for intangible assets and one-time inventory step-up costs from the Chiron acquisition more than offset lower costs in the Pharmaceuticals Division related to productivity gains and product mix improvements.

Marketing & Sales from continuing operations

Marketing & Sales expenses increased 11% to $10.5 billion and reflects an increase in the US Pharmaceuticals Division sales force. However, Marketing & Sales expenses declined as a percentage of net sales from continuing operations to 29.0% compared to 30.3% in 2005.

Research & Development from continuing operations

Research & Development expenses rose 11% to $5.3 billion as a result of our ongoing investments in the Novartis Institutes for BioMedical Research in the US as well as clinical trials for late stage compounds. These compounds include FTY720 (multiple sclerosis) and QAB149 (respiratory diseases). R&D expenses as a percentage of net sales from continuing operations declined to 14.8% of net sales compared to 15.6% in 2005.

General & Administration from continuing operations

General & Administration expenses rose 16% to $2.0 billion in 2006, in line with net sales from continuing operations. General & Administration expenses remained at 5.4% of net sales from continuing operations.

Other Income & Expense from continuing operations

Other Income and Expense amounted to a net expense of $741 million in 2006 compared to $355 million in 2005. This increase was primarily due to $144 million of lower divestment gains in the Pharmaceuticals Division in 2006 and $175 million of acquisition costs for Chiron in the Pharmaceuticals and Vaccines and Diagnostics Divisions.

4. Operating Income by Division

Operating income from continuing operations advanced 17%, at a higher pace than sales growth as the strong sales volume expansion and productivity improvements were only partially offset by one-time and other acquisition-related costs related to the Chiron transaction of $642 million. Group operating income would have increased by 28% if these costs were excluded.

	Year ended December 31,		
	2006	**2005**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Pharmaceuticals	**6,703**	**6,014**	**11**
Vaccines and Diagnostics	**(26)**		
Sandoz Division	**736**	**342**	**115**
Consumer Health	**1,068**	**952**	**12**
Corporate income and expense, net	(532)	(506)	5
Operating income from continuing operations	**7,949**	**6,802**	**17**
Operating income from discontinuing operations	225	103	118
Group operating income	**8,174**	**6,905**	**18**

Pharmaceuticals Division

The Pharmaceuticals Division operating income (excluding Chiron acquisition-related costs of $309 million) advanced 17% and the corresponding operating margin reached 31.1%. Reported operating income kept pace with net sales, rising 11% from productivity gains in all areas and despite the impact of costs to integrate Chiron's pharmaceuticals business. These amounted to $226 million for restructuring and inventory step-up charges and $83 million for increased amortization of intangible assets. The division also had lower divestment gains than in 2005. The operating margin on net sales remained at 29.7% despite these factors. Other revenues rose significantly, principally due to US co-promotion contributions for the asthma medicine *Xolair.* Cost of Goods Sold rose 17%, as one-time Chiron costs offset savings from good cost management and improved product mix. Marketing & Sales expenses rose at a slower pace than net sales, climbing 9%, as productivity gains offset marketing investments to support multiple planned new product launches, particularly in the US, as well as the expansion of activities in emerging growth markets such as China and Turkey. Research & Development expenses were up 7% to $4.3 billion as investments were made in key late-stage projects. Research & Development increased 17% if the exceptional $332 million NKS104 impairment is excluded from the 2005 amounts.

Vaccines and Diagnostics Division

Although Vaccines and Diagnostics reported an operating loss of $26 million, this is after recording substantial acquisition-related costs. Excluding these, the division had an operating income of $307 million for the period following the acquisition in April 2006. This strong performance was more than offset by one-time restructuring and other acquisition-related costs of $333 million comprised of restructuring

charges of $44 million, one-time inventory step-up costs of $117 million and amortization of intangible assets of $172 million.

Sandoz Division

Sandoz operating income advanced significantly faster than net sales growth, rising 115% to $736 million due to operational improvements and the non-recurrence of integration costs in the year ago period. An accounting irregularity in France resulted in a $69 million operating income charge.

Consumer Health Division continuing operations

Consumer Health operating income rose 12% for continuing operations on strong performances of strategic brands in OTC and Animal Health, offset by a weak performance in CIBA Vision due to product supply issues.

Discontinuing Consumer Health Division operations

The Nutrition & Santé unit of the Medical Nutrition Business Unit generated $2 million operating income until its divestment in February 2006. The pre-tax divestment gain on selling this unit amounted to $129 million. The balance of the Medical Nutrition Business Unit generated operating income of $94 million in 2006.

Corporate Income & Expense, net

Net corporate expense totaled $532 million compared to $506 million in 2005.

5. Net income

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

	Year ended December 31,		
	2006	**2005**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Operating income from continuing operations	**7,949**	**6,802**	**17**
Income from associated companies	264	193	37
Financial income	354	461	(23)
Interest expense	(266)	(294)	(10)
Income before taxes from continuing operations	**8,301**	**7,162**	**16**
Taxes	(1,282)	(1,090)	18
Net income from continuing operations	**7,019**	**6,072**	**16**
Net income from discontinuing operations	183	69	165
Group net income	**7,202**	**6,141**	**17**
Attributable to			
Shareholders of Novartis AG	*7,175*	*6,130*	*17*
Minority interests	*27*	*11*	*145*

Income from associated companies

Associated companies are accounted for using the equity method when we hold between 20% and 50% of the voting shares of these companies, or where we otherwise have significant influence over them. Income from associated companies is mainly derived from the Group's investment in Roche Holding AG ("Roche"). Income from our investment in Chiron Corporation has been accounted for using the equity method until we acquired the remaining outstanding shares in April 2006.

For 2006, income from associated companies rose to $264 million from $193 million in 2005. Our 44% interest in Chiron before our acquisition contributed a loss of $44 million compared to a gain of $19 million in 2005, due to exceptional charges of $53 million in the period prior to full consolidation. This charge was principally related to the accelerated vesting of Chiron share options.

Our 33.3% interest in Roche voting shares, which represents a 6.3% interest in the total equity of Roche, generated income of $290 million, up from $166 million in 2005. This reflects an estimate of our share of 2006 income from Roche, which is $404 million and includes a positive prior-year adjustment of $13 million. This income was reduced by a charge of $114 million for the amortization of intangible assets arising from the allocation of our purchase price to Roche's property, plant & equipment and intangible assets.

A survey of analyst estimates is used to predict our share of net income in Roche. Any differences between these estimates and actual results will be adjusted in 2007.

Financial income and interest expense from continuing operations

Net financial income fell to $88 million from $167 million in 2005, reflecting the sharp decline of $3.8 billion in average net liquidity as a result of recent acquisitions. At December 31, 2006, we had net liquidity from continuing operations of $656 million compared to $2.5 billion at the end of 2005. As a result, financial income fell to $354 million in 2006 from $461 million in the year-ago period.

The following table provides an analysis of our sources of financial income:

	Equity options	Forward exchange contracts	Foreign exchange options	Interest Rate Swaps/Cross Currency Swaps/ Forward Rate Agreements	Total
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
2006					
Income on options and forward contracts	8	250	13	(223)	48
Expenses on options and forward contracts	(6)	(293)	(17)		(316)
Options and forward contracts result, net	2	(43)	(4)	(223)	(268)
Interest income					367
Dividend income					8
Net capital gains					282
Impairment of marketable securities					(25)
Other financial result, net					(48)
Currency result, net					38
Total financial income					**354**
2005					
Income on options and forward contracts	21	92	39	(69)	83
Expenses on options and forward contracts	(32)	(58)	(53)	(1)	(144)
Options and forward contracts result, net	(11)	34	(14)	(70)	(61)
Interest income					405
Dividend income					3
Net capital gains					94
Impairment of marketable securities					(49)
Other financial result, net					(46)
Currency result, net					115
Total financial income					**461**

Taxes

Our effective tax rate, including discontinuing operations, was 15.5% in 2006, the same as in 2005. Tax expense on continuing operations rose 17.6% to $1.3 billion from $1.1 billion in the year-ago period. Our effective tax rate on continuing operations (taxes as a percentage of income before tax) was 15.4% in 2006 compared to 15.2% in 2005.

Our expected tax rate on continuing operations (weighted average tax rate based on the result before tax of each subsidiary) was 15.8% compared to 15.9% in 2005. The effective tax rate is different than the

expected tax rate due to various adjustments to expenditures and income for tax purposes. See "Item 18. Financial Statements note 6" for details of the main elements contributing to the difference.

Net income from discontinuing operations

Our after-tax net income from discontinuing operations was $183 million. This comprises the result from the Medical Nutrition Business Unit of Consumer Health and also a pre-tax gain of $129 million from the Nutrition & Santé divestment in 2006.

Group net income

Our Group net income advanced 17% to $7.2 billion from $6.1 billion in 2005, rising faster than net sales due to the strong underlying operating income performance which more than compensated the Chiron acquisition-related charges. These net charges of $451 million comprise $642 million of operating charges, offset by $244 million in related tax savings, however also included an exceptional reduction of income from associated companies of $53 million in the four months up to Chiron's full consolidation in April. Excluding these acquisition-related effects net income rose 25%. Also effecting net income was lower net financial income due to the lower average net liquidity as a result of the 2006 acquisitions. Group net income increased to 19.5% of Group net sales compared to 19.1% in 2005. Net income from continuing operations was also 19.5% of the related net sales. The return on average equity arising from the Group net income was 19.3% compared to 19.0% in 2005.

2005 Compared to 2004

The following compares our results in the year ended December 31, 2005 to those of the year ended December 31, 2004. Our analysis, which except for net sales, is primarily based on the 2004 pro forma figures, is divided as follows:

1. *Group Overview*
2. *Net Sales by Division*
3. *Other Revenues and Operating Expenses*
4. *Operating Income by Division*
5. *Net Income*

1. Group Overview

Our Group net sales rose 14% (+13% in local currencies, or lc) to $32.2 billion in 2005 based on the dynamic expansion of Pharmaceuticals and Sandoz, which was supported by the acquisitions of Hexal and Eon Labs in 2005, as well as good performances in Consumer Health, particularly OTC. Volume increases were the primary growth driver, contributing 9 percentage points to our net sales growth. Currency benefits added 1 percentage point, while acquisitions added 5 percentage points. Prices across the Group declined 1 percentage point. Pharmaceuticals accounted for 63% of our total Group net sales, Sandoz for Group 15% and Consumer Health 22%. The US remained our largest market, accounting for 39% of our total Group net sales, Europe for 37% and the rest of the world for 24%.

Group operating income advanced 10% at a slower rate than sales, as productivity improvements and the strong volume expansion were partially offset by one-time costs, particularly related to acquisitions. Cost of Goods Sold rose 22% and increased as a percentage of Group net sales by 1.8 percentage points to 27.5%, owing mainly to purchase price accounting impacts and increased amortization of intangible assets in Sandoz related to acquisitions. Marketing & Sales expenses fell 1 percentage point to 30.4% of Group net sales based primarily on productivity improvements in Pharmaceuticals. Research & Development expenses rose 19%, which included a $332 million impairment charge for the development compound NKS104, and represented 15% of Group net sales. General & Administrative expenses as a percentage of

Group net sales declined 0.1 percentage point, accounting for 5.4% of net sales. Our Group operating margin decreased to 21.4% of Group net sales from 22.3% in 2004, based on acquisition-related costs in Sandoz as well as impairment related charges in Pharmaceuticals.

Our Group net income advanced 10% to $6.1 billion, reflecting the strong organic growth. Earnings per share rose 11%, slightly faster than net income, due to the impact of the share repurchase programs, to $2.63 per share from $2.37 in 2004.

2. Net Sales by Division

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

	Year ended December 31,			
	2005	2004	Change in $	Change in local currencies
	($ millions)	($ millions)	(%)	(%)
Net sales				
Pharmaceuticals	**20,262**	**18,497**	**10**	**9**
Sandoz	**4,694**	**3,045**	**54**	**54**
Consumer Health	**6,049**	**5,584**	**8**	**8**
Net sales from continuing operations	**31,005**	**27,126**	**14**	**14**
Net sales from discontinuing operations	1,207	1,121	8	7
Group net sales	**32,212**	**28,247**	**14**	**13**

As discussed in the Critical Accounting Policies Section, the US market has the most complex arrangements in the area of deductions from gross sales to arrive at net sales, which is the starting point for all our discussions on our sales developments. The following table shows the extent of sales deductions made in the US for our key subsidiaries affected, which are NPC, Sandoz Inc., Eon Labs Inc., and Novartis Consumer Health Inc. (OTC):

Gross to Net sales reconciliation in the US

	2005	% of gross sales	2004	% of gross sales
	($ millions)		($ millions)	
Gross Sales subject to deductions	**13,266**	**100**	**11,028**	**100**
Medicaid & Medicare and State program rebates & credits including prescription drug saving cards	(774)	(6)	(624)	(6)
Managed healthcare rebates	(499)	(4)	(538)	(5)
Chargebacks including hospital chargebacks	(1,405)	(11)	(800)	(7)
Direct discounts, cash discounts & other rebates	(568)	(4)	(115)	(1)
Sales returns & other deductions	(268)	(2)	(355)	(3)
Total Gross to Net sales adjustments	**(3,514)**	**(27)**	**(2,432)**	**(22)**
Net sales	**9,752**	**73**	**8,596**	**78**

The principal reason for the changes in the percentage deductions from gross sales are the following:

The 4 percentage points increase of chargebacks including hospital chargebacks in 2005 as compared to 2004 is principally a reflection of the higher gross sales, as well as the mix of end users and the acquisition of Eon Labs.

Pharmaceuticals Division

Note: The following discussion is based on the old therapeutic areas of our Pharmaceuticals Division. For details of the new organizational structure see "Item 4. Information on the company Item 4.B Business Overview Pharmaceuticals Overview."

Pharmaceuticals net sales were up 10% (9% lc) to $20.3 billion, delivering dynamic growth ahead of the market and in all regions. Our Cardiovascular and Oncology franchises each generated more than $5 billion in annual net sales while also maintaining double-digit growth rates. Many leading products, particularly *Diovan, Lotrel and Gleevec/Glivec*, were the No. 1 products by sales in their therapeutic categories. New data continued to underpin the strong position of *Femara*, which delivered sales growth of nearly 40% for the year. Volume and product mix accounted for nine percentage points of net sales growth in US dollars, while currency benefits added one percentage point. Net price changes had no impact.

General Medicines (excluding Mature Products) delivered a net sales increase of 11% (+10% lc) as strategic cardiovascular brand sales rose 15% (+15% lc). Net sales in Specialty Medicines (Oncology, Transplantation and Ophthalmics) were up 15% (+15% 1c) as Oncology net sales were up 21% (+20% lc) thanks to new data supporting the clinical benefits of many of the "best-in-class" medicines.

Net sales advanced 10% to $8.1 billion in the US as strong performances by the cardiovascular and oncology franchises as well as *Zelnorm/Zelmac* more than offset lower sales of the eczema treatment *Elidel*, which was impacted by an FDA health advisory statement in March 2005 relating to a theoretical risk of lymphoma for this class of medicines. In Europe, net sales rose 7% (+7% lc), supported particularly by *Diovan*, that was partly offset by launches of generic terbinafine (*Lamisil*) in key markets, while Japan advanced 6% (+9% lc). Emerging growth markets reported an increase of 19% (+17% lc), thanks to dynamic performances in China, Russia and Turkey.

General Medicines

Diovan ($3.7 billion, +19% lc) the leading angiotensin-receptor blocker (ARB) worldwide, continued its strong performance. Key drivers have been recently approved indications and the global rollout of higher strengths of *Co-Diovan* (a combination of *Diovan* and a diuretic) as well as disease-awareness and education programs (such as the "BP Success Zone") in the US. *Diovan* is the only agent in its class worldwide indicated to treat high blood pressure, high-risk heart attack survivors (VALIANT trial) and patients with heart failure (Val-HeFT trial). In the US *Diovan* is the leading seller in the ARB market segment, with a 38% share (Source: IMS).

Lotrel ($1.1 billion, +17% US), the No. 1 fixed combination treatment for hypertension in the US since 2002, kept up double-digit growth based on new guidelines recommending more aggressive treatment of elevated blood pressure with multiple medicines and the US disease awareness campaign.

Lamisil ($1.1 billion, -2% lc), the leading treatment worldwide for fungal nail infections, had lower overall sales as a result of generic competition in most major European markets. In the US, sales were slightly higher, further increasing its leadership despite the launch in 2005 of a generic version of our competitor itraconazole.

Zelnorm/Zelmac ($418 million, +39% lc), a breakthrough therapy for irritable bowel syndrome (IBS) with constipation (IBS-C) and the first and only prescription medicine for chronic idiopathic constipation, maintained double-digit growth rates in the US and other key markets, reflecting the

product's therapeutic benefits and increasing disease awareness. In the US, the performance was driven by the continued strong uptake of *Zelnorm/Zelmac* in its new chronic constipation indication and also benefited from the normalization of inventories compared to below-average levels in the year-ago period. We will appeal an opinion from a European Medicines Agency (EMEA) committee recommending against EU approval of *Zelnorm*. This product has been approved in 56 countries for treatment of women with irritable bowel syndrome with constipation (IBS-C).

Elidel ($270 million, -23% lc), had a decline in sales since a FDA health advisory statement in March 2005 relating to a theoretical risk of lymphoma for this class of medicines. Sales in the rest of the world declined at a more moderate rate. Product labeling discussions are ongoing with the FDA. We remain confident in the safety and efficacy of *Elidel* in its approved indications.

Specialty Medicines

Oncology

Gleevec/Glivec ($2.2 billion, +32% lc), indicated for all stages of Philadelphia-chromosome positive (Ph+) chronic myeloid leukemia (CML) and certain forms of gastro-intestinal stromal tumors (GIST), maintained growth rates through further penetration of the CML and GIST markets. Also supporting growth have been an increase in the average daily dose as well as increasing number of patients thanks to improved survival benefits. Data from the IRIS study showed that more than 90% of patients with newly-diagnosed chronic phase CML who are taking *Gleevec/Glivec* are still alive after 4.5 years. Moreover less than 1% of patients progressed to advanced disease in the fourth year, indicating an overall decreased rate of progression. *Gleevec/Glivec* received EU approval in 2005 for increasing the average daily dose to 800 mg from 400 mg or 600 mg for patients with chronic phase CML and in GIST patients whose cancer is progressing on the lower dose. *Gleevec/Glivec* has been submitted in the US, EU and Japan for Ph+ acute lymphoblastic leukemia (ALL).

Zometa ($1.2 billion, 13% lc), the leading intra-venous bisphosphonate for bone metastases, reached a record 75% market segment share in a maturing US market. Greater use in prostate and lung cancer was somewhat offset by slowing growth in breast cancer and myeloma due to high penetration rates. In the EU, *Zometa* is growing market share despite new competition.

Femara ($536 million, +38% lc), a leading first-line therapy for early and advanced breast cancer in post-menopausal women, benefited from further penetration of the extended adjuvant setting after five years of tamoxifen therapy. Data from the landmark MA-17 trial reported at a major medical meeting found that post-menopausal women with early breast cancer received significant benefit from *Femara* therapy even after a prolonged period of no anti-cancer treatment. In addition, *Femara* received US approval in December 2005 for use as an initial treatment immediately after surgery in patients with hormone-sensitive early breast cancer (adjuvant setting), becoming the only medicine in its class approved in the US for use as an initial treatment as well as after completion of five years of tamoxifen therapy. This new US indication was based on results from the BIG 1-98 study, which were published for the first time in the December 2005 issue of *The New England Journal of Medicine*. Submissions for this new indication have been made in Europe, where it has already been approved in the UK. *Femara* has also received approval in Japan for use in the treatment of post-menopausal women with breast cancer.

Sandostatin ($896 million, +8% lc) for patients with the hormone condition acromegaly as well as for symptoms of gastro-entero-pancreatic neuroendocrine tumors, reported a decline in the US, where the subcutaneous formulation faces generic competition. However, sales of the long-acting LAR version expanded at a double-digit rate in the US and the rest of the world.

Ophthalmics

Net sales increased 8% in US dollars (7% lc), as *Visudyne* ($484 million, +7% lc), the leading treatment for "wet" AMD (age-related macular degeneration), were higher despite the entry of off-label competition in the US. *Visudyne* growth was strong in the rest of the world, including the UK, Germany, and France, with sales outside the US up 24% in local currencies.

Transplantation

Net sales for the year declined 1% in local currencies based on lower sales of *Neoral/Sandimmun* ($953 million, -6% lc) due to the impact of ongoing generic competition.

Top 20 Pharmaceutical Division Product Net Sales 2005

Brands	Therapeutic Area	United States	% change in local currencies	Rest of the World	% change in local currencies	Total	% change in $	% change in local currencies
		($ millions)		($ millions)		($ millions)		
Diovan/Co-Diovan	Hypertension	1,551	17	2,125	20	3,676	19	19
Gleevec/Glivec	Chronic myeloid leukemia/Gastro-intestinal stromal tumors	524	42	1,646	28	2,170	33	32
Zometa	Cancer complications	704	12	520	14	1,224	14	13
Lamisil (group)	Fungal infections	538	2	595	(6)	1,133	(2)	(2)
Lotrel	Hypertension	1,075	17			1,075	17	17
Neoral/Sandimmun	Transplantation	150	(17)	803	(4)	953	(6)	(6)
Sandostatin (incl. LAR)	Acromegaly	376	1	520	13	896	8	8
Lescol	Cholesterol reduction	257	(10)	510	7	767	1	1
Voltaren (group)	Inflammation/pain	5	(44)	684	8	689	8	7
Trileptal	Epilepsy	462	18	153	17	615	19	18
Top ten products		**5,642**	**13**	**7,556**	**13**	**13,198**	**13**	**13**
Femara	Breast cancer	242	46	294	33	536	39	38
Visudyne	Macular degeneration	183	(12)	301	24	484	8	7
Exelon	Alzheimer's disease	172	(4)	295	18	467	11	9
Zelnorm/Zelmac	Irritable bowel syndrome	357	43	61	17	418	40	39
Tegretol (incl. CR/XR)	Epilepsy	109	6	284	(5)	393	(1)	(2)
Miacalcic	Osteoporosis	229	(3)	136	(5)	365	(3)	(4)
Foradil	Asthma	14	8	318	2	332	3	2
Comtan/Stalevo Group	Parkinson's disease	133	24	145	53	278	39	38
Elidel	Eczema	192	(31)	78	8	270	(23)	(23)
Famvir	Viral infections	151	(6)	103	4	254		(2)
Top twenty products		**7,424**	**11**	**9,571**	**13**	**16,995**	**13**	**12**
Rest of portfolio		723	10	2,606	(6)	3,329	(2)	(3)
Total Division sales excluding accounting adjustments		**8,147**	**11**	**12,177**	**8**	**20,324**	**10**	**9**
Prior-years' US sales rebate accounting adjustment		(62)				(62)		
Total		**8,085**	**10**	**12,177**	**8**	**20,262**	**10**	**9**

Sandoz Division

Net sales increased 54% (+54% lc) to $4.7 billion, driven by $1.4 billion in sales contributions from Hexal (starting June 6) and Eon Labs (starting July 20). Excluding these acquisitions, sales rose 9% (+8 lc) thanks to strong retail generics sales in Europe and Russia as well as new launches in the US.

Consumer Health Division continuing operations

Net sales increased 8% (+8% lc) to $6.0 billion, helped by double-digit growth performance in OTC tied to its focus on strategic brands and the contribution of the North American OTC business of Bristol-Myers Squibb (BMS), which we acquired effective September 1, 2005. This acquisition added $100 million in sales to the division.

Discontinuing Consumer Health Division operations

Net sales increased by 8% (+7% lc) to $1.2 billion driven by the acquisition effect of Mead Johnson.

3. Other Revenues and Operating Expenses

	Year ended December 31,		
	2005	2004 Pro forma	Change in $
	($ millions)	($ millions)	(%)
Net sales from continuing operations	**31,005**	**27,126**	**14**
Other revenues	314	151	108
Cost of Goods Sold	(8,259)	(6,700)	23
Marketing & Sales	(9,397)	(8,503)	11
Research & Development	(4,825)	(4,058)	19
General & Administration	(1,681)	(1,486)	13
Other Income & Expense	(355)	(287)	24
Operating income from continuing operations	**6,802**	**6,243**	**4**
Operating income from discontinuing operations	103	46	124
Group operating income	**6,905**	**6,289**	**10**

Other revenues

Other revenues were higher, primarily the result of increased contributions from the sale of the asthma medicine *Xolair* in the US, where it is co-marketed and co-developed in partnership with Genentech and Tanox, and the result of additional royalty income.

Cost of Goods Sold from continuing operations

Cost of Goods Sold rose 23% to $8.3 billion in 2005, rising to 26.7% in 2005 as a percentage of our net sales from continuing operations from 24.7% in 2004. Purchase price accounting impacts and increased amortization of intangible assets in Sandoz due to the acquisitions more than offset lower costs in our Pharmaceuticals Division related to productivity gains and product mix improvements.

Marketing & Sales from continuing operations

Marketing & Sales expenses increased 11% to $9.4 billion, but declined slightly as a percentage of net sales from continuing operations to 30.3% compared to 31.3% in 2004, mainly reflecting the impact of sustained productivity gains in the Pharmaceuticals Division.

Research & Development from continuing operations

Research & Development expenses rose 19% in 2005 to $4.8 billion, reflecting investments in the Novartis Institutes for BioMedical Research in the US as well as in late-stage compounds, particularly *Rasilez* (hypertension), *Galvus* (type 2 diabetes) and FTY720 (multiple sclerosis). Also affecting Research & Development was an impairment of $332 million for NKS104, a lipid-lowering agent project that has been stopped, and the consolidation of Hexal and Eon Labs in Sandoz. R&D expenses as a percentage of net sales from continuing operations went up to 15.6% compared to 15.0% in 2004. The 2004 pro forma impact reflects a reduction in expense of $94 million from capitalization of previously expensed Pharmaceuticals Division acquired R&D intangible assets payments.

General & Administration from continuing operations

General & Administration expenses rose 13% to $1.7 billion in 2005, expanding at a slower pace than net sales from continuing operations, leading to a modest improvement as a percentage of net sales to 5.4% compared to 5.5% in 2004.

Other Income & Expense from continuing operations

Other Income & Expense from continuing operations was a net charge of $355 million in 2005 compared to a net charge of $287 million in 2004. The 2004 pro forma impact reflects a reduction in expense of $84 million from ending goodwill amortization and an increase of $52 million in expense from share-based compensation, resulting in a net $32 million reduction in expense.

4. Operating Income by Division

Group operating income advanced 10%, at a slightly lower pace than sales, as strong volume expansion and productivity improvements were partially offset by one-time costs related to acquisitions.

	Year ended December 31,		
	2005	**2004 Pro forma**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Pharmaceuticals	**6,014**	**5,366**	**12**
Sandoz Division	**342**	**263**	**30**
Consumer Health	**952**	**960**	**(1)**
Corporate income and expense, net	(506)	(346)	46
Operating income from continuing operations	**6,802**	**6,243**	**9**
Operating income from discontinuing operations	103	46	124
Group operating income	**6,905**	**6,289**	**10**

Pharmaceuticals Division

Pharmaceuticals operating income expansion outpaced sales growth, rising 12% from productivity gains in all areas that led to an operating margin of 29.7%, an increase of 0.7 percentage points over 2004. Other revenues contributed 0.5 percentage points to the improved operating margin, reflecting profits from the successful launch of the asthma medicine *Xolair*. Costs of Goods Sold improved 0.3 percentage points as a percent of sales, thanks to productivity gains and product mix improvements. Marketing & Sales costs rose 6.3% versus 2004, slower than the 2005 sales growth, leading to an improvement of

1.0 percentage point as productivity gains, especially in the US, offset investments in oncology, particularly for *Femara*, as well as expansion in emerging markets such as China and Turkey. General & Administration costs were reduced to 3.2% of sales adding 0.3 percentage points to the improved operating margin. A slight decline in Other Income & Expenses also contributed to the better performance. Research & Development costs were higher, reflecting investments in late-stage development projects particularly *Rasilez* (hypertension), *Galvus* (type 2 diabetes) and FTY720 (multiple sclerosis). One-time gains of $231 million from the divestment of product rights for *Cibadrex/Cibacen* in Europe and the sale of license rights for Restasis® recorded in Other Income and Expense partially offset an impairment recorded in Research & Development of $332 million after management decided the profile of the development compound NKS104 (pitavastatin) was no longer competitive from its point of view. Principally as a result of the impairment R&D costs as a percentage of sales rose 1.4 percentage points to 19.6% in 2005. The 2004 forma operating income reflects the impact of $94 million reduction in expense from capitalization of previously expensed acquired R&D intangible assets, as well as a $20 million reduction in expense from ending goodwill amortization.

Sandoz Division

Operating income rose 30% to $342 million, benefiting from a good underlying business performance. Also supporting growth was an operating income contribution of $344 million from Hexal and Eon Labs, which more than offset the one-time acquisition and related integration costs of $237 million and the amortization of intangible assets of $100 million. These businesses exceeded expectations and performed well since their acquisition in mid-2005. The 2004 pro forma operating income reflects the impact of $23 million reduction in expense from ending goodwill amortization.

Consumer Health Division continuing operations

Consumer Health operating income from continuing operations was down 1% over the year-ago period due to investments in strategic brands and acquisition-related costs. The Bristol-Myers Squibb acquisition provided operating income of $17 million, which was more than offset by related one-time charges of $40 million. The 2004 pro forma operating income reflects the impact of $41 million reduction in expense from ending goodwill amortization.

Discontinuing Consumer Health Division operations

Operating income was up 124% to $103 million from $46 million in 2004, primarily due to $51 million of additional legal provisions and $14 million of Mead Johnson acquisition-related costs being recorded in 2004.

Corporate Income and Expense, net

Net Corporate expense totaled $506 million in 2005, compared to $346 million in 2004, reflecting several factors including increased product liability risk provisions. The 2004 pro forma amounts reflect an additional expense of $52 million primarily from share-based compensation.

5. Net income

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

	Year ended December 31,		
	2005	**2004 Pro forma**	**Change in $**
	($ millions)	**($ millions)**	**(%)**
Operating income from continuing operations	**6,802**	**6,243**	**9**
Income from associated companies	193	177	9
Financial income	461	488	(6)
Interest expense	(294)	(261)	13
Income before taxes from continuing operations	**7,162**	**6,647**	**8**
Taxes	(1,090)	(1,072)	2
Net income from continuing operations	**6,072**	**5,575**	**9**
Net income from discontinuing operations	69	26	165
Group net income	**6,141**	**5,601**	**10**
Attributable to			
Shareholders of Novartis AG	*6,130*	*5,586*	*10*
Minority interests	*11*	*15*	*(27)*

Income from associated companies

Associated companies are accounted for using the equity method when we own between 20% and 50% of the voting shares of these companies, or where we otherwise have significant influence over them. Income from associated companies is mainly derived from our investments in Roche Holding AG and Chiron Corporation. Overall, income from associated companies increased to $193 million from $177 million in 2004. Our 44.1% interest in Chiron contributed an income of $19 million compared to an income of $13 million in 2004.

Our 33.3% interest in Roche voting shares, which represents a 6.3% interest in the total equity of Roche, generated income of $166 million compared to $156 million in 2004. The income for 2005 reflects an estimate of our share of Roche's 2005 income, which is $281 million, including a positive prior year adjustment of $2 million. This income was reduced by an intangible amortization charge of $115 million arising from the allocation of the purchase price to property, plant & equipment and intangible assets.

The 2004 pro forma adjustment relates to a reduction in expense from ending goodwill amortization of $154 million and an increase in expense from share-based compensation in respect of associated companies of $45 million.

A survey of analyst estimates is used to predict our share of the net income of both Roche and Chiron. Any differences between these estimates and actual results will be adjusted in 2006.

Financial income and interest expense from continuing operations

$461 million of financial income was offset by $294 million of interest expense resulting in financial income, net of $167 million in 2005, compared to $227 million in 2004, a reduction of $60 million, as acquisitions led to a decline in average net liquidity. The overall return on net liquidity for the year was 4.2%, up from 3.7% in 2004 principally due to currency gains.

The following table provides an analysis of our sources of financial income:

	Equity options	Bond options	Forward exchange contracts	Foreign exchange options	Interest Rate Swaps/Cross Currency Swaps/Forward Rate Agreements	Total
	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)	($ millions)
2005						
Income on options and forward contracts	21		92	39	(69)	83
Expenses on options and forward contracts	(32)		(58)	(53)	(1)	(144)
Options and forward contracts result, net	(11)		34	(14)	(70)	(61)
Interest income						405
Dividend income						3
Net capital gains						94
Impairment of marketable securities						(49)
Other financial result, net						(46)
Currency result, net						115
Total financial income						**461**
2004 Pro Forma						
Income on options and forward contracts	93	9	59	68	77	306
Expenses on options and forward contracts	(104)	(8)	(162)	(58)		(332)
Options and forward contracts result, net	(11)	1	(103)	10	77	(26)
Interest income						388
Dividend income						12
Net capital gains						123
Impairment of marketable securities						(66)
Other financial result, net						(38)
Currency result, net						95
Total financial income						**488**

Taxes

Our effective tax rate including discontinuing operations was 15.5% in 2005 compared to 16.3% in 2004 pro forma. Tax expense on continuing operations rose 2% to $1.1 billion in 2005. Our effective tax rate on continuing operations (taxes as a percentage of income before taxes) was 15.2% in 2005 compared to 16.1% in 2004 pro forma.

Our expected tax rate on continuing operations (weighted average tax rate based on the result before tax of each subsidiary) was 15.9% in 2005 compared to 16.6% in 2004 pro forma. Our effective tax rate is different than the expected tax rate due to various adjustments to expenditures and income for tax purposes. See "Item 18. Financial Statements note 6" for details of the main elements contributing to the difference.

The actual amount of taxes are different from the pro forma amounts due to the tax effect of the various pro forma adjustments. See "Item 5.A Operating Results 2004 Pro Forma Consolidated Financial Information" for a more detailed discussion.

Net income from discontinuing operations

Net income grew 165% to $69 million from $26 million mainly due to increased legal provisions and acquisition-related costs in 2004.

Group net income

Group net income grew 10% to $6.1 billion from $5.6 billion in 2004, rising at a slower rate than sales based mainly on acquisition-related charges. As a percentage of Group net sales, Group net income decreased to 19.1% in 2005 compared to 19.8% in 2004.

Return on average equity was 19.0% in 2005 compared to 18.6% in 2004.

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,		
	2006	**2005**	**2004 Pro Forma**
	($ millions)	**($ millions)**	**($ millions)**
Cash flow from operating activities from continuing operations	8,710	7,975	6,658
Cash flow used for investing activities from continuing operations	(6,575)	(7,449)	(2,910)
Cash flow used for financing activities from continuing operations	(4,970)	(270)	(2,998)
Cash flow from discontinuing operations	308	76	(369)
Translation effect on cash and cash equivalents	25	(94)	56
Cash and cash equivalents at the end of the year of discontinuing operations	(4)		
Net change in cash and cash equivalents of continuing operations	**(2,506)**	**238**	**437**
Change in current and non-current marketable securities	(472)	(3,197)	834
Change in current and non-current financial debts	1,155	(1,599)	(885)
Change in net liquidity	**(1,823)**	**(4,558)**	**386**
Net liquidity at January 1	2,479	7,037	6,651
Net liquidity of continuing operations at December 31	**656**	**2,479**	**7,037**
Net debts of discontinuing operations at December 31	(3)		

	Year ended December 31,		
Net liquidity at December 31	**653**	**2,479**	**7,037**

The analysis of our cash flow, which is primarily on a pro forma basis, is divided as follows:

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

1. Cash Flow From Operating Activities and Free Cash Flow

Our primary source of liquidity is cash generated from our operations. In 2006, cash flow from operating activities from continuing operations increased by 9% ($735 million) to $8.7 billion, reflecting the strong business expansion and good working capital management of the divisions.

In 2005, our cash flow from operating activities from continuing operations increased by $1.3 billion or 20% to $8.0 billion reflecting the strong business expansion and good working capital management of the divisions.

Under IAS 38 (revised) acquired R&D assets need to be capitalized as intangible assets. Accordingly, the 2004 pro forma consolidated cash flow statement includes the reclassification of $94 million for capitalized R&D payments to cash flow used for investing activities.

Our Group free cash flow from continuing operations, excluding the impact of the acquisitions or divestments of subsidiaries, associated companies and minority investments, decreased by 8% to $4.2 billion in 2006 from $4.6 billion in 2005 as the increase in cash flow from operating activities was offset by increased payments for property, plant and equipment and intangible assets and lower proceeds from asset disposals. The Group free cash flow from continuing operations, increased by 40% from $3.3 billion in 2004 to $4.6 billion in 2005 mainly due to the increase in cash flow from operating activities.

Our capital expenditure from continuing operations on property, plant and equipment for 2006 increased by $0.6 billion to $1.8 billion (5.0% of Group net sales in 2006 and 3.7% of Group net sales in 2005) from $1.2 billion in 2005. In 2004, investments in property, plant and equipment amounted to $1.3 billion (4.6% of Group net sales).

This level of capital expenditure reflects the continuing investment in Production as well as Research and Development facilities. We expect to increase spending to approximately 5.5 to 6.0% of net sales from continuing operations in 2007, 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. 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 calculations. Free Cash Flow is not intended to be a substitute measure for cash flow from operating activities (as determined under IFRS or US GAAP).

The following table details the components of these increases.

	Year ended December 31,		
	2006	2005	2004 Pro Forma
	($ millions)	($ millions)	($ millions)
Cash flow from operating activities of continuing operations	**8,710**	**7,975**	**6,658**
Purchase of property, plant & equipment	(1,802)	(1,157)	(1,259)
Purchase of intangible assets	(520)	(358)	(274)
Purchase of financial assets	(825)	(782)	(740)
Proceeds from sale of property, plant & equipment	87	73	128
Proceeds from sale of intangible and financial assets	632	957	668
Dividends paid to third parties	(2,049)	(2,107)	(1,896)
Free cash flow from continuing operations	**4,233**	**4,601**	**3,285**
Free cash flow from discontinuing operations	107	72	16
Group free cash flow	**4,340**	**4,673**	**3,301**

2. Cash Flow used for Investing Activities

In 2006, cash outflow due to continuing investing activities was $6.6 billion. A total net amount of $4.5 billion was spent on acquisitions principally Chiron Corporation and NeuTec Pharma plc, while investments in property, plant & equipment amounted to $1.8 billion and $0.3 billion was spent on other investing activities.

In 2005, cash outflow due to continuing investing activities was $7.4 billion. A total of $8.8 billion was spent on acquisitions, including an additional, approximately 2% stake in newly-issued shares of Chiron, which we acquired through an existing agreement for a total amount of $300 million. Investments in property, plant and equipment amounted to $1.2 billion and $0.1 billion was spent on other investing activities. Net proceeds from marketable securities were $2.7 billion.

In 2004, cash outflow due to continuing investing activities was $2.9 billion. A total of $0.6 billion was spent on acquisitions, while investments in property, plant & equipment amounted to $1.3 billion. The net payments for acquiring marketable securities was $0.8 billion and other investments accounted for $0.2 billion.

Under IAS 38 (revised) acquired R&D assets need to be capitalized as intangible assets. Accordingly, the 2004 pro forma consolidated cash flow statement includes the reclassification of $94 million for capitalized R&D payments from cash flow from operating activities.

3. Cash Flow used for Financing Activities

Cash flow used for continuing financing activities in 2006 was $5.0 billion, an increase of $4.7 billion from 2005. $2.0 billion was spent on dividend payments. $2.9 billion net cash outflow was due to the repayment of current and non-current financial debts which included the repayment of $1.1 billion for an outstanding euro bond; repayment of $0.9 billion of convertible bonds acquired with the Chiron transaction and repayment of $1.2 billion of current debt taken up to finance the 2005 Hexal AG acquisition.

Cash flow used for continuing financing activities in 2005 was $0.3 billion. $0.2 billion was spent on the acquisition of treasury shares and $2.1 billion on dividend payments. $2.0 billion inflow was due to the increase in short and long-term financial debts.

Cash flow used for continuing financing activities in 2004 was $3.0 billion. $1.8 billion was spent on the acquisition of treasury shares and $1.9 billion on dividend payments. $0.7 billion cash inflow was due to the increase in short and long-term financial debt and a capital inflow from the IPO of Idenix Inc.

4. Net Liquidity

Overall liquidity (cash, cash equivalents and marketable securities including financial derivatives) amounted to $8.0 billion at December 31, 2006. Net liquidity (liquidity less current and non-current financial debt) fell by $1.8 billion to a total of $656 million at December 31, 2006, compared to $2.5 billion at the start of the year, reflecting the acquisitions made during the year.

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 or US GAAP.

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

In August 2004, we announced the completion of the third share-repurchase program and the start of a fourth program to repurchase shares via a second trading line on the SWX Swiss Exchange for approximately $2.4 billion (CHF 3.0 billion). Additionally, a fifth share repurchase program for up to CHF 4.0 billion was approved at the Annual General Meeting on March 1, 2005. In 2004, a total of 22.8 million shares were repurchased for $1.0 billion to complete the third repurchase program. Since the start of the fourth program, a total of 25.4 million shares have been repurchased for $1.2 billion. No shares were repurchased under the fourth program in 2006.

In 2006, our share capital was reduced by 10.2 million shares bought through the purchase programs on the second trading line in 2005.

In 2005, our share capital was reduced by 38.0 million shares relating to shares bought on the second trading line in 2004.

In 2004, our share capital was reduced by 24.3 million shares relating to shares bought on the second trading line in 2003.

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 4.0 billion. During 2003, 24.3 million shares were repurchased via

a second trading line for a total amount of $939 million. 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.

At December 31, 2006, our holding of treasury shares amounted to 380.7 million shares or 14% of the total number of issued shares.

Straight Bonds

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 which was repaid in 2006, in the amount of EUR 900 million.

Direct Share Purchase Plans

Since 2001 we have been offering US investors the ADS Direct Plan, which provides investors in the US an easy and inexpensive way of directly purchasing Novartis shares and of reinvesting dividends. This plan holds Novartis ADSs which are listed on the NYSE under the trading symbol NVS. At the end of 2005, the US Direct Share Purchase Plan had 453 participants. Since September 1, 2004 we have also offered a Direct Share Purchase Program to investors residing in Switzerland, Liechtenstein, France and the UK, which was the first of its kind in Europe. With this plan we offer an easy and inexpensive way of directly purchasing our registered shares and of depositing them free of charge with SAS SIS Aktienregister AG. As of December 31, 2006, a total of 9,134 shareholders were or had been enrolled in this program.

5.C Research & Development, Patents and Licenses

Our Research & Development spending totaled $5.4 billion, $4.8 billion, and $4.1 billion for the years 2006, 2005 and 2004, respectively. Each of our Divisions 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 Factors Affecting Results of Operations" 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 or other off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources, that is material to investors. See also "Item 18. Financial Statements note 28" and " note 29" and matters described in "Item 5.F. Aggregate Contractual Obligations Contingencies".

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, 2006, the aggregate total amount of payments, including potential milestones, which may be required under these agreements was $2.9 billion. We expect to fund these long-term research agreements with internally generated resources.

As of December 31, 2006, our total financial debt was $7.3 billion, as compared with $8.5 billion as of December 31, 2005, and $6.9 billion as of December 31, 2004. The decrease from 2005 to 2006 of $1.2 billion was mainly due to the repayment of an outstanding euro bond, as well as the repayment of current debt taken up to finance the 2005 acquisition of Hexal AG partly offset by currency translation effects. Our December 31, 2006 debt/equity ratio decreased to 0.18:1 from 0.25:1 in 2005 due to the increase in equity and a decrease in financial liabilities.

The increase from 2004 to 2005 of $1.6 billion was due to a net increase in current financial debt (including the current portion of non-current debt) of $3.0 billion which was partially offset by a reduction in non-current debt.

We had $1.3 billion in straight bonds at December 31, 2006, down from $2.3 billion at December 31, 2005 and $3.2 billion as of December 31, 2004. The decreases in 2006 and 2005 have been due to repayments of a euro bond in 2006 and euro medium term note in 2005.

For details on the maturity profile of debt, currency and interest rate structure, see "Item 18. Financial Statements note 18."

As of December 31, 2006, we had current debt (excluding the current portion of non-current debt) of $5.3 billion as compared with $6.0 billion as of December 31, 2005, and $3.4 billion as of December 31, 2004.

This current debt consisted mainly of $3.8 billion (2005: $4.9 billion; 2004: $2.1 billion) in other bank and financial debt, including interest bearing employee accounts; and $1.4 billion (2005: $0.8 billion; 2004: $0.4 billion) of commercial paper. In 2004, short-term debt also included $0.7 billion in repurchase agreements created during 2004.

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 "Item 18. Financial Statements note 18". Our debt continues to be rated by Standard & Poor's, Moody's and Fitch as AAA, Aaa and AAA for long-term maturities and A1+, P1 and F1+ for short-term debt. We consider our financial resources and facilities to be sufficient for our present requirements.

The following table summarizes our contractual obligations and other commercial commitments at December 31, 2006 and the effect such obligations and commitments are expected to have on our liquidity and cash flow in future periods.

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 year**	**2-3 years**	**4-5 years**	**After 5 years**
	($ millions)	**($ millions)**	**($ millions)**	**($ millions)**	**($ millions)**
Non-current financial debt	1,996	1,340	560	33	63
Operating leases	1,193	309	370	183	331
Unfunded pension and other post-retirement obligations	1,860	99	205	222	1,334
Research & Development Commitments					
unconditional	77	33	27	17	
potential milestone payments	2,785	199	865	631	1,090
Purchase commitments					
property, plant & equipment	563	376	158	29	
Total contractual cash Obligations	**8,474**	**2,356**	**2,185**	**1,115**	**2,818**

We expect to fund the operating leases and long-term Research & Development commitments and other purchase commitments with internally generated resources.

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

Board of Directors

The members of the Board are:

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

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

Daniel Vasella, M.D., Swiss, age 53.

Function at Novartis AG. Since 1996 Daniel Vasella has served as Chief Executive Officer of the Group and as executive member of the Board of Directors. In 1999, he was also appointed Chairman of the Board of Directors.

Activities in governing or supervisory bodies. Dr. Vasella is also a member of the Board of Directors of Pepsico, Inc.*, United States, a member of the Board of Dean's Advisors at the Harvard Business School, and a member of the INSEAD Board of Directors.

Professional background. Dr. Vasella graduated with an M.D. from the University of Bern in 1979. After holding a number of medical positions in Switzerland, he joined Sandoz Pharmaceuticals Corporation in the US in 1988. From 1993 to 1995, Dr. Vasella advanced from Head of Corporate Marketing and Senior Vice President and Head of Worldwide Development to Chief Operating Officer of Sandoz Pharma Ltd. In 1995 and 1996, Dr. Vasella was a member of the Sandoz Group Executive Committee and Chief Executive Officer of Sandoz Pharma Ltd. He received the Harvard Business School's Alumni Achievement Award and the Appeal of Conscience Award as well as the AJ Congress Humanitarian Award and numerous other awards. Dr. Vasella was awarded an honorary doctorate by the University of Basel. He has also been honored with the Ordem Nacional do Cruzeiro do Sul (Brazil) and holds the rank of Chevalier in the Ordre National de la Légion d'honneur (France).

Permanent management or consultancy engagements. Dr. Vasella is a member of the International Board of Governors of the Peres Center for Peace in Israel and a member of the International Business Leaders Advisory Council for the Mayor of Shanghai. He also serves as a member of several industry associations and educational institutions.

Ulrich Lehner, Ph.D., German, age 60.

Function at Novartis AG. Ulrich Lehner was elected in 2002 to the Board of Directors of Novartis AG. He became Vice Chairman and Lead Director in 2006 and is Chairman of the Audit and Compliance Committee. He is a member of the Chairman's Committee, the Compensation Committee and the Corporate Governance and Nomination Committee. The Board has appointed him as Audit Committee Financial Expert. He qualifies as an independent Non-Executive Director.

Activities in governing or supervisory bodies. Ulrich Lehner is Chairman of the Management Board of Henkel KGaA, Germany. He also serves as a member of the Board of Ecolab Inc.*, United States, as member of the supervisory board of E.ON AG* and of HSBC Trinkaus & Burkhardt KGaA*, both in Germany.

Professional background. Ulrich Lehner studied business administration and mechanical engineering. From 1975 to 1981, Ulrich Lehner was an auditor with KPMG Deutsche Treuhand-Gesellschaft AG in Duesseldorf. In 1981, he joined Henkel KGaA. After heading the Controlling Department of Fried. Krupp GmbH in Germany from 1983 to 1986, he returned to Henkel as Finance Director. From 1991 to 1994, Ulrich Lehner headed the Management Holding Henkel Asia-Pacific Ltd. in Hong Kong. From 1995 to 2000, he served as Executive Vice President, Finance/Logistics (CFO), of Henkel.

Hans-Joerg Rudloff, German, age 66.

Function at Novartis AG. Since 1996 Hans-Joerg Rudloff has served as Vice Chairman. In 1999, he became a member of the Chairman's Committee and the Compensation Committee and since 2002 he has been a member of the Corporate Governance and Nomination Committee. He qualifies as an independent, Non-Executive Director. Since 2004 Hans-Joerg Rudloff has been a member of the Audit and Compliance Committee.

Activities in governing or supervisory bodies. Hans-Joerg Rudloff joined Barclays Capital* in 1998, where he is presently Chairman. Hans-Joerg Rudloff also serves on a number of boards of other companies, including the Boards of Directors of the TBG Group (Thyssen-Bornemisza Group), Monaco, Marcuard Group, Geneva, RBC, Russia and ADB Consulting, Geneva, Switzerland. In 2005, Hans-Joerg Rudloff became Chairman of the International Capital Markets Association (ICMA) and is Chairman of the Compensation Committee of ICMA. In 2006, he joined Rosneft and became Chairman of the Audit Committee and the Remuneration Committee. He also is the Chairman of the Board of Bluebay Asset Management Ltd.

Professional background. Hans-Joerg Rudloff studied economics at the University of Bern and graduated in 1965. He joined Credit Suisse in Geneva and moved to New York in 1968 to join the investment banking firm of Kidder Peabody Inc. He was in charge of the Swiss operation and was elected Chairman of Kidder Peabody International and a member of the Board of Kidder Peabody Inc. in 1978. In 1980 he joined Credit Suisse First Boston and was elected Vice Chairman in 1983 and Chairman and CEO in 1989. From 1986 to 1990, Hans-Joerg Rudloff was also a member of the Executive Board of Credit Suisse in Zurich in charge of all securities and capital market departments. From 1994 to 1998 Hans-Joerg Rudloff was Chairman of MC-BBL in Luxembourg. In 1994, Hans-Joerg Rudloff was elected to the Board of Directors of Sandoz AG.

Permanent management or consultancy engagements. Hans-Joerg Rudloff is a member of the Advisory Board of the MBA program of the University of Bern, Switzerland, of Landeskreditbank Baden-Wuerttemberg, Germany, and EnBW (Energie Baden-Wuerttemberg), Germany.

Dr. h.c. Birgit Breuel, German, age 69.

Function at Novartis AG. Since 1996, Birgit Breuel has served as a Member of the Board. In 1999, she became a member of the Audit and Compliance Committee. She qualifies as an independent, Non-Executive Director.

Professional background. Birgit Breuel studied politics at the Universities of Hamburg, Oxford and Geneva. She was Minister of Economy and Transport (1978-1986) and Minister of Finance (1986-1990) of Niedersachsen (Lower Saxony), the second-largest state of Germany. In 1990, Birgit Breuel was elected to the Executive Board of the Treuhandanstalt, which was responsible for the privatization of the former East Germany's economy. In 1991, she also became the President of the Treuhandanstalt. From 1995 to 2000, she acted as the General Commissioner and CEO of the world exhibition EXPO 2000 in Hanover, Germany.

Peter Burckhardt, M.D., Swiss, age 68.

Function at Novartis AG. Dr. Burckhardt has been a member of the Board of Directors since 1996. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies. From 1982 to 2004 Dr. Burckhardt has been the Chairman of the Novartis (formerly Sandoz) Foundation for Biomedical Research in Switzerland. Since 1982, Dr. Burckhardt has been the Head of the Department of Internal Medicine at the University Hospital of Lausanne, then chief of medical service A, until 2004.

Professional background. Dr. Burckhardt is a Professor of Medicine and the former Chairman of the Department of Internal Medicine at the University Hospital of Lausanne, Switzerland. He has an M.D. from the University of Basel and is a trained internal medicine and endocrinology specialist from the University of Lausanne and the Massachusetts General Hospital, Boston. In addition to his clinical activities, Dr. Burckhardt conducts clinical research, mainly in bone diseases and calcium metabolism. He has authored more than 300 scientific publications and is an editorial board member of several international scientific journals. He was president of the Swiss Society of Internal Medicine, a member of the appeal committee of the national agency for drug controls, Chairman of National Societies and member of the Executive Committee of the International Foundation of Osteoporosis, and treasurer until 2006. Other experiences comprise board membership in several scientific societies including the Swiss Societies of Nutrition, Clinical Chemistry, Endocrinology, Bone and Mineral Research, the Committee for Endocrinology of the European Community and advisory roles to scientific foundations in Switzerland and Germany.

Permanent management or consultancy engagements. Since 1990, he has been the organizer and chairman of the International Symposia on Nutrition and Osteoporosis.

Srikant Datar, Ph.D., American, age 53.

Function at Novartis AG. Srikant Datar became a member of the Board in 2003. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies. Srikant Datar is a member of the Board of ICF International, Fairfax, Virginia.

Professional background. In 1973, Srikant Datar graduated with distinction in mathematics and economics at the University of Bombay. He is a Chartered Accountant and holds two masters degrees and a Ph.D. from Stanford University. Srikant Datar has worked as an accountant and planner in industry and as a professor at the Universities of Carnegie Mellon, Stanford and Harvard in the US. He currently holds the Arthur Lowes Dickinson Professorship at Harvard University. His research interests are in the areas

of cost management, measurement of productivity, new product development, time-based competition, incentives and performance evaluation. He is the author of many scientific publications and has received several academic awards and honors. Srikant Datar has advised and worked with numerous renowned firms such as General Motors, Mellon Bank and Morgan Stanley in research, development and training.

Permanent management or consultancy engagements. Srikant Datar is Senior Associate Dean at the Graduate School of Business Administration of Harvard University, Boston, Massachusetts.

William W. George, American, age 64.

Function at Novartis AG. In 1999, William W. George was elected as a member of the Board of Directors. In 2000, he became a member of the Compensation Committee. In 2001, he became a member of the Chairman's Committee and also the Chairman of the Corporate Governance and Nomination Committee. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies. William W. George is a member of the Boards of Directors of Goldman Sachs* and Exxon Mobil*.

Professional background. William W. George received his BSIE from Georgia Institute of Technology in 1964 and his MBA from Harvard University in 1966. From 1966 to 1969, he worked in the US Department of Defense as special assistant to the Secretary of the Navy and as assistant to the Comptroller. After having served as President of Litton Microwave Cooking Products, William W. George held a series of executive positions with Honeywell from 1978 to 1989. Thereafter he served as President and Chief Operating Officer of Medtronic, Inc. in Minneapolis, and, from 1991 to 2001, as its Chief Executive Officer. From 1996 to 2002, he was Medtronic's Chairman. He has served as Executive-in-Residence at Yale School of Management and Professor of Leadership and Governance at IMD International in Lausanne, Switzerland.

Permanent management or consultancy engagements. William W. George is Professor of Management Practice at Harvard Business School. In addition, he is a trustee of the Carnegie Endowment for International Peace and the World Economic Forum USA.

Alexandre F. Jetzer, Swiss, age 65.

Function at Novartis AG. Alexandre F. Jetzer has served as a Director since 1996. He is a Non-Executive Director.

Activities in governing or supervisory Bodies. Alexandre F. Jetzer is also a member of the Board of Directors of Clariden Bank, Zurich, Switzerland, of the Supervisory Board of Compagnie Financière Michelin, Granges-Paccot (FR), Switzerland, and of the Board of the Lucerne Festival Foundation, Lucerne, Switzerland.

Professional background. Alexandre F. Jetzer graduated with Masters of law and economics from the University of Neuchâtel, Switzerland and is a licensed attorney. After serving as General Secretary of the Swiss Federation of Commerce and Industry (Vorort) from 1967 on, Alexandre F. Jetzer joined Sandoz in 1980. In 1981 he was appointed Member of the Sandoz Group Executive Committee in the capacity of Chief Financial Officer (CFO) and, as of 1990, as Head of Management Resources and International Coordination. From 1995 to 1996, he was Chairman and Chief Executive Officer of Sandoz Pharmaceuticals Corporation in East Hanover, New Jersey (US) and he additionally served as President and CEO of Sandoz Corporation in New York (NY). After the merger which created Novartis in 1996 until 1999, he was appointed as a member of the Executive Committee of Novartis and Head of International Coordination, Legal & Taxes.

Permanent management or consultancy engagements. Alexandre F. Jetzer has a consultancy agreement with Novartis International AG (Government Relations Support). In addition he is a member of the International Advisory Panel (IAP) on Biotechnology Strategy of the Prime Minister of Malaysia and a member of the Development Committee of the Neuroscience Center of the University of Zurich, Switzerland.

Pierre Landolt, Swiss, age 59.

Function at Novartis AG. Pierre Landolt has served as a Director since 1996. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies. Pierre Landolt is President of the Sandoz Family Foundation, Glaris, Switzerland, Chairman of the Board of Directors of Emasan AG, Basel, Switzerland, and of Vaucher Manufacture Fleurier SA, Fleurier, Switzerland. He is a member of the Board of Directors of Syngenta AG*, where he also serves as member of the Audit Committee, and of the Syngenta Foundation for Sustainable Agriculture, both in Basel, Switzerland. In addition, Pierre Landolt is Associate Partner of Banque Landolt & Cie, Lausanne, Switzerland, and Vice Chairman of the Board of Directors of Parmigiani Fleurier SA., Fleurier, Switzerland, and of the "Fondation du Montreux Jazz Festival," Montreux, Switzerland.

Professional background. Pierre Landolt graduated with a Bachelor of Law degree from the University of Paris-Assas. From 1974 to 1976, he worked for Sandoz Brazil SA. In 1977, he acquired an agricultural estate in the arid Northeast region of Brazil and transformed it into a model farm for organic and biotechnological development. He also created an irrigation company, initially for his own farm and today active in the entire northern region of Brazil. Since 1997, Pierre Landolt has been Associate and Chairman of AxialPar Ltda, São Paulo, Brazil, an investment company focussed on sustainable development. In 2000, he co-founded EcoCarbone France, Paris, a company active in the design and development of carbon sequestration processes in Asia, Africa, South America and Europe.

Andreas von Planta, Ph.D., Swiss, age 51.

Function at Novartis AG. In 2006, Andreas von Planta was elected to the Board of Directors of Novartis AG. He has been a member of the Audit and Compliance Committee since 2006. He qualifies as an independent, Non-Executive Director

Activities in governing or supervisory bodies. Andreas von Planta is Vice Chairman of Holcim Ltd* and the Schweizerische National-Versicherungs-Gesellschaft AG*, and is a member of the boards of various Swiss subsidiaries of foreign companies.

Professional background. Andreas von Planta holds lic. iur. and Ph.D. degrees from the University of Basel and an LL.M. from Columbia University School of Law, New York. He passed his bar examinations in Basel in 1982. Since 1983, he has lived in Geneva, working for the law firm Lenz & Staehelin where he became a partner in 1988. His areas of specialization include corporate law, corporate finance, company reorganizations and mergers & acquisitions.

Permanent management or consultancy engagements. Andreas von Planta sits on the Board of Editors of the Swiss Review of Business Law, and is a former Chairman of the Geneva Association of Business Law.

Dr. Ing. Wendelin Wiedeking, German, age 54.

Function at Novartis AG. Wendelin Wiedeking was elected as a member of the Board in 2003. He qualifies as an independent, Non-Executive Director.

Activities in governing or supervisory bodies. Wendelin Wiedeking is Chairman of the Executive Board of Dr. Ing. h.c. F. Porsche AG,* Germany.

Professional background. Born in Ahlen, Germany, Mr. Wiedeking studied mechanical engineering and worked as a scientific assistant in the Machine Tool Laboratory of the Rhine-Westphalian College of Advanced Technology in Aachen. His professional career began in 1983 as Director's Assistant in the Production and Materials Management area of Dr.-Ing. h.c. F. Porsche AG in Stuttgart-Zuffenhausen. In 1988, he moved to the Glyco Metall-Werke KG in Wiesbaden as Division Manager, where he advanced by 1990 to the position of Chief Executive and Chairman of the Board of Management of Glyco AG. In 1991, he returned to Porsche AG as Production Director. A year later, the Supervisory Board appointed him spokesman of the Executive Board (CEO), and Chairman in 1993.

Rolf M. Zinkernagel, M.D., Swiss, age 62.

Function at Novartis AG. In 1999, Dr. Zinkernagel was elected to the Board of Directors of Novartis AG. He has been a member of the Corporate Governance and Nomination Committee since 2001. He qualifies as an independent, Non-Executive Director.

Professional background. Dr. Zinkernagel graduated from the University of Basel with an M.D. in 1970. Since 1992 he has been Professor and Director of the Institute of Experimental Immunology at the University of Zurich. Dr. Zinkernagel has received many awards and prizes for his work and contribution to science, the most prestigious being the Nobel Prize for Medicine which he was awarded in 1996. Dr. Zinkernagel was a member of the Board of Directors of Cytos Biotechnology AG*, Schlieren/Zurich, Switzerland until April 2003.

Permanent management or consultancy engagements. Dr. Zinkernagel is a member of the Swiss Society of Allergy and Immunology, the American Associations of Immunologists and of Pathologists, the ENI European Network of Immunological Institutions, and President of the Executive Board of the International Union of Immunological Societies (IUIS). He is also a member of the Scientific Advisory Boards of: Bio-Alliance AG, Frankfurt, Germany; Aravis General Partner Ltd., Cayman Islands; Bioxell*, Milan, Italy; Esbatech, Zurich, Switzerland; Novimmune, Geneva, Switzerland; Miikana Therapeutics, Fremont CA (until January 2006); Nuvo Research* (until September 2005: Dimethaid), Toronto, Canada; Humab, San Francisco CA, US; xbiotech, Vancouver, Canada; ImVision, Hannover, Germany; MannKind*, Sylmar CA, US; and Laboratoire Koch, Lausanne, Switzerland (since 2006). Dr. Zinkernagel is also a Science Consultant to: GenPat77, Berlin/Munich, Germany; Liponova*, Hannover, Germany; Solis Therapeutics, Palo Alto, US; Ganymed, Mainz, Germany; and Zhen-Ao Group, Dalian, China.

Note: Companies identified with an asterisk (*) are publicly-listed companies.

Executive Officers and Senior Management

Daniel Vasella, M.D., Swiss, age 53. See " Board of Directors."

Urs Baerlocher, J.D., Swiss, age 64. Urs Baerlocher earned his J.D. from the University of Basel and was admitted to the bar in 1970. After working as a tax lawyer, he joined Sandoz Ltd. in 1973, and held a number of key positions including Head of Strategic Planning and Head of Group Reporting. In 1987, he was made a member of the Sandoz Executive Board, responsible i.a. for Strategic Planning, Human Resources, Legal, Taxes, Patents and Trademarks. In 1990, he became CEO of the Sandoz Nutrition Division and in 1993 CEO of Sandoz Pharma Ltd. In 1995, Urs Baerlocher assumed the position of Chairman of the Board of Sandoz Deutschland GmbH (Germany) and Biochemie GmbH (Austria). After the formation of Novartis in 1996, Urs Baerlocher was appointed Head of Legal, Tax, Insurance, to which Corporate Security and International Coordination were added. In 1999, he became a member of the

Executive Committee of Novartis. From 2000, he held the position of Head of Legal and General Affairs. His responsibilities were extended to include Corporate Intellectual Property and Corporate Health, Safety & Environment as well as from 2004, Corporate Risk Management and from 2005, Public Affairs and the functional reporting of Group Quality Operations. Since May 2006, Urs Baerlocher has been Head of Legal and Tax Affairs.

Raymund Breu, Ph.D., Swiss, age 61. Raymund Breu graduated from the Swiss Federal Institute of Technology (ETH) in Zurich, Switzerland, with a Ph.D. in mathematics. In 1975, he joined the Treasury Department of the Sandoz Group, and, in 1982, became the Head of Finance for the Sandoz affiliates in the UK. In 1985, he was appointed Chief Financial Officer of Sandoz Corporation in New York, where he was responsible for all Sandoz Finance activities in the US. In 1990, he became Group Treasurer of Sandoz Ltd., Basel, Switzerland, and, in 1993, Head of Group Finance and Member of the Sandoz Executive Board. Following the formation of Novartis in 1996, Raymund Breu assumed his current position as Chief Financial Officer and member of the Executive Committee of Novartis. He is also a member of the Board of Directors of Swiss Re, the SWX Swiss Exchange and its admission panel, and the Swiss takeover commission.

Juergen Brokatzky-Geiger, Ph.D., German, age 54. Juergen Brokatzky-Geiger graduated with a Ph.D. in Chemistry from the University of Freiburg, Germany in 1982. He joined Ciba-Geigy Ltd. in 1983 as a Laboratory Head in the Pharmaceuticals Division. After a job rotation in Summit, New Jersey from 1987 to 1988 he held positions of increasing responsibility in Research and Development (R&D) including Group Leader of Process R&D, Head of Process R&D and Head of Process Development and Pilot Plant Operations. During the merger of Ciba-Geigy and Sandoz in 1996, Juergen Brokatzky-Geiger was appointed Integration Officer of Technical Operations. Thereafter, he became the Head of Chemical and Analytical Development and served as the Global Head of Technical R&D from 1999 to August 2003. Juergen Brokatzky-Geiger was appointed to his present position as Head of Human Resources on September 1, 2003. He has been a member of the Executive Committee of Novartis since January 1, 2005.

Paul Choffat, J.D., Swiss, age 57. Paul Choffat holds a J.D. from the University of Lausanne, Switzerland, and an M.B.A. from the International Institute for Management Development (IMD) in Lausanne. He started his professional career with Nestlé in Zurich, Switzerland, and London, UK. From 1981 to 1985, he was a project manager at McKinsey & Company in Zurich. Between 1987 and 1994, Paul Choffat held a number of senior positions at Landis & Gyr in Zug, Switzerland, where he became a member of the Executive Board and Head of the Communications Division. In 1994, he moved to Von Roll in Gerlafingen, Switzerland, as CEO. Paul Choffat joined Sandoz Ltd. in 1995 as Head of Management Resources and International Coordination. He subsequently became a member of the Executive Board and was responsible for Group Planning and Organization. During the Novartis merger he headed the Integration Office. In 1996, Paul Choffat returned to line management as CEO of Fotolabo SA, Montpreveyres-sur-Lausanne, Switzerland, where he remained for three years before becoming an entrepreneur and private investor in 1999. He rejoined Novartis in January 2002 as Head of Novartis Consumer Health and member of the Executive Committee of Novartis.

Thomas Ebeling, German, age 47. Thomas Ebeling graduated from the University of Hamburg, Germany with a degree in psychology. From 1987 to 1991, he held several positions of increasing responsibility at Reemstma Germany. In 1991, he joined Pepsi-Cola Germany as Marketing Director. He became Marketing Director for Germany and Austria in 1993, and was National Sales and Franchise Director for Pepsi's retail and on-premise sales from 1994. He then served as General Manager of Pepsi-Cola Germany. In 1997, Thomas Ebeling joined Novartis as General Manager of Novartis Nutrition for Germany and Austria. After serving as CEO of Novartis Nutrition worldwide, he became CEO of Novartis Consumer Health Division and Chief Operating Officer of Novartis Pharma AG before attaining his present position in 2000. He has been a member of the Board of Directors of Idenix Pharmaceuticals Inc. since 2003.

Mark C. Fishman, M.D., American, age 55. Dr. Fishman graduated with a B.A. from Yale College in 1972 and an M.D. from Harvard Medical School in 1976. He was appointed President of the Novartis Institutes

for BioMedical Research (NIBR) in 2002. Before joining Novartis, Dr. Fishman was Chief of Cardiology and Director of the Cardiovascular Research Center at the Massachusetts General Hospital in Boston, Massachusetts. He continues to hold a professorship in the Department of Medicine at Harvard Medical School. Dr. Fishman serves on several editorial boards and has worked with national policy and scientific committees including those of the US National Institutes of Health (NIH) and the Wellcome Trust. He completed his Internal Medicine residency, Chief residency, and Cardiology training at the Massachusetts General Hospital. He has been honored with many awards and distinguished lectureships, and is a member of the Institute of Medicine of the National Academies (US) and Fellow of the American Academy of Arts and Sciences.

Joerg Reinhardt, Ph.D., German, age 50. Joerg Reinhardt graduated with a Ph.D. in Pharmaceutical Sciences from the University of Saarbruecken, Germany in 1981. In April 2006, he became CEO of the new Novartis Vaccines and Diagnostics Division that combines the vaccines and blood testing businesses of the former Chiron Corp. Previously, Joerg Reinhardt was Head of Development at the Novartis Pharmaceuticals Division, overseeing the company's clinical, pharmaceutical, chemical and biotechnological product development, as well as drug safety assessment and regulatory affairs. Joerg Reinhardt joined Sandoz Pharma Ltd. in 1982 and held positions of increasing responsibility in research and development for the company. In 1994, he was made Head of Development for Sandoz Pharma Ltd. After the merger that created Novartis in 1996, Joerg Reinhardt became Head of Preclinical Development and Project Management for Novartis and assumed the position of Head of Pharmaceutical Development in 1999. He chairs the Board of Directors of the Genomics Institute of the Novartis Foundation in La Jolla, California. He has been a member of the Executive Committee of Novartis since January 1, 2007.

Andreas Rummelt, Ph.D., German, age 49. Andreas Rummelt graduated with a Ph.D. in Pharmaceutical Sciences from the University of Erlangen-Nuernberg, Germany. He joined Sandoz Pharma Ltd. in 1985 and held various positions in Development. From 1985 to 1994, he served as a Laboratory Head, then Group Head, and finally as Department Head in the area of Drug Delivery Systems. In 1994 he was appointed Head of Worldwide Technical Research & Development, a position he retained following the merger that created Novartis in 1996. From 1999 until October 2004, Andreas Rummelt served as Head of Technical Operations of Novartis Pharma AG. He was appointed to his present position as CEO of Sandoz on November 1, 2004 and has been a member of the Executive Committee of Novartis since January 1, 2006.

Thomas Wellauer, Ph.D., Swiss, age 51. Thomas Wellauer graduated with a Ph.D. in Systems Engineering and an M.S. in Chemical Engineering from the Swiss Federal Institute of Technology (ETH). He also holds a M.B.A. from the University of Zurich. Thomas Wellauer joined Novartis in 2006 as Head of Corporate Services. He started his career with McKinsey and Company, becoming a Partner in 1991 and Senior Partner in 1996. In 1997, he was named CEO of the Winterthur Insurance Group, which later was acquired by Credit Suisse. At Credit Suisse he was a member of the Group Executive Board, initially responsible for the group's insurance business before becoming CEO of the Financial Services Division. Most recently before joining Novartis, Thomas Wellauer headed and completed the Clariant Performance Improvement Program, a global turnaround project at the specialty chemicals maker. He has been a member of the Executive Committee of Novartis since January 1, 2007.

Business Unit Heads

Name, nationality and age	Head of Business Unit	Active for Novartis since	Significant positions previously held	Education
David Epstein American, 45	Oncology	1989	Chief Operating Officer and member of the Executive Committee of Novartis Pharmaceuticals Corporation	Bachelor of Science, Pharmacy, Rutgers University, and M.B.A., Columbia University
Larry Allgaier American, 48	OTC	2003	VP and General Manager, North America Baby Care, for Procter & Gamble	Bachelor of Science, Chemical Engineering Christian Brothers University
George Gunn British, 56	Animal Health	2003	President Animal Health, Pharmacia Corp.; Head Animal Health, US and Region North America, for Novartis Animal Health	Bachelor of Veterinary Medicine and Surgery from the Royal Dick School of Veterinary Studies, Edinburgh, UK

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