



# FORM 10-K

**MERCK & CO INC – mrk**

**Filed: March 21, 2003 (period: December 31, 2002)**

Annual report which provides a comprehensive overview of the company for the past year

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**SECURITIES AND EXCHANGE COMMISSION**

Washington, D. C. 20549

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**FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2002

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

**Commission File No. 1-3305**

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**MERCK & CO., INC.**

One Merck Drive

Whitehouse Station, N. J. 08889-0100

(908) 423-1000

*Incorporated in New Jersey*

*I.R.S. Employer  
Identification No. 22-1109110*

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

*Title of Each Class*

Common Stock  
(\$0.01 par value)

*Name of Each Exchange*

*on which Registered*

New York and Philadelphia Stock Exchanges

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Number of shares of Common Stock (\$0.01 par value) outstanding as of February 28, 2003: 2,244,505,244.

Aggregate market value of Common Stock (\$0.01 par value) held by non-affiliates on June 28, 2002 based on closing price on June 28, 2002: \$114,166,000,000.

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**  **No**

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). **Yes**  **No**

**DOCUMENTS INCORPORATED BY REFERENCE:**

<u>Document</u>	<u>Part of Form 10-K</u>
Annual Report to stockholders for the fiscal year ended December 31, 2002	Parts I and II
Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003	Part III

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## PART I

### Item 1. Business.

Merck & Co., Inc. (the "Company") is a global research-driven pharmaceutical products and services company that discovers, develops, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures, and provides pharmacy benefit management services through Medco Health Solutions, Inc. ("Medco Health"). The Company's operations are principally managed on a products and services basis and are comprised of two reportable segments: Merck Pharmaceutical, which includes products marketed either directly or through joint ventures, and Medco Health. Merck Pharmaceutical products consist of therapeutic and preventive agents, sold by prescription, for the treatment and prevention of human disorders. Medco Health revenues consist principally of sales of prescription drugs through managed prescription drug programs, either from its home delivery pharmacies or its network of contractually affiliated retail pharmacies, as well as services provided through programs to help its clients control the cost and enhance the quality of the prescription drug benefits offered to their members.

The following table shows the sales of various categories of the Company's products and services:

(\$ in millions)	2002	2001	2000
Atherosclerosis	\$ 5,688.6	\$ 5,525.6	\$ 4,624.1
Hypertension/heart failure	3,496.8	3,602.1	4,041.5
Anti-inflammatory/analgesics	2,613.3	2,421.5	2,115.5
Osteoporosis	2,248.6	1,632.8	1,197.4
Respiratory	1,505.6	1,268.8	800.5
Vaccines/biologicals	1,028.3	1,022.4	952.0
Anti-bacterial/anti-fungal	822.4	751.3	744.0
Ophthalmologicals	622.5	646.5	632.2
Urology	547.9	548.5	449.5
Human immunodeficiency virus ("HIV")	293.3	381.8	500.9
Other	2,764.0	3,545.7	4,165.3
Medco Health	30,159.0	26,368.7	20,140.3
Total	\$ 51,790.3	\$ 47,715.7	\$ 40,363.2

Beginning in 2002, sales by individual therapeutic class are presented net of rebates and discounts. These amounts were previously presented on a gross basis, whereby rebates and discounts were included in Other. Because rebates and discounts have always been included in total net sales, this change in presentation has no effect on consolidated sales or net income. Sales by individual therapeutic class for 2001 and 2000 are presented on a comparable basis to 2002.

Human health products include therapeutic and preventive agents, generally sold by prescription, for the treatment of human disorders. Among these are atherosclerosis products, of which *Zocor* (simvastatin) is the largest-selling; hypertension/heart failure products, the most significant of which are *Cozaar* (losartan potassium), *Hyzaar* (losartan potassium and hydrochlorothiazide), *Vasotec* (enalapril maleate) and *Prinivil* (lisinopril); anti-inflammatory/analgesics, which includes *Vioxx* (rofecoxib) and *Arcoxia* (etoricoxib), agents that specifically inhibit the COX-2 enzyme, which is responsible for pain and inflammation; an osteoporosis product, *Fosamax* (alendronate sodium), for treatment and prevention of osteoporosis; a respiratory product, *Singulair* (montelukast sodium), a leukotriene receptor antagonist; vaccines/biologicals, of which *Varivax* (varicella virus vaccine live), a live virus vaccine for the prevention of chickenpox, *M-M-R II* (measles, mumps and rubella virus vaccine live), and *Recombivax HB* (hepatitis B vaccine [recombinant]) are the largest-selling; anti-bacterial/anti-fungal products, which includes *Primaxin* (imipenem and cilastatin sodium) and *Candidas* (caspofungin acetate), as well as the recently launched *Invanz* (ertapenem sodium); ophthalmologicals, of which *Cosopt* (dorzolamide

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hydrochloride and timolol maleate ophthalmic solution) and *Trusopt* (dorzolamide hydrochloride ophthalmic solution) are the largest-selling; a urology product, *Proscar* (finasteride), for treatment of symptomatic benign prostate enlargement; and HIV products, which includes *Crixivan* (indinavir sulfate), a protease inhibitor for the treatment of human immunodeficiency viral infection in adults.

Other primarily includes sales of other human pharmaceuticals, also net of rebates and discounts, and pharmaceutical and animal health supply sales to the Company's joint ventures and AstraZeneca LP, of which *Prilosec* (omeprazole) and *Nexium* (esomeprazole magnesium) are the most significant.

Medco Health primarily includes Medco Health sales of non-Merck products and Medco Health pharmacy benefit services, principally sales of prescription drugs through managed prescription drug programs, as well as services provided through programs to help its clients control the cost and enhance the quality of the prescription drug benefits to their members.

In January 2002, the Company announced plans to establish Medco Health as a separate, publicly-traded company. Medco Health converted from a limited liability company to a Delaware corporation in May 2002 and changed its name from Merck-Medco Managed Care, L.L.C. to Medco Health Solutions, Inc. In July 2002, the Company announced that due solely to market conditions it was postponing an initial public offering ("IPO") of shares of Medco Health and it withdrew the associated equity registration statement. The Company remains fully committed to the establishment of Medco Health as a separate, publicly-traded company and intends to complete the separation in mid-2003, subject to market conditions.

In September 2002, the U.S. Food and Drug Administration ("FDA") approved *Cozaar*, the Company's angiotensin II antagonist for the treatment of high blood pressure, to reduce the rate of progression of nephropathy (kidney disease) in Type 2 diabetic patients with hypertension and nephropathy with an elevated serum creatinine and proteinuria. Also in 2002, the Company submitted a supplemental New Drug Application to the FDA for *Cozaar* based on the results of the Losartan Intervention for Endpoint Reduction in Hypertension ("LIFE") study. In the LIFE study, use of *Cozaar* significantly reduced the combined risk of cardiovascular morbidity and mortality, most notably stroke, in patients with hypertension and left ventricular hypertrophy compared to the beta-blocker atenolol. However, in an analysis of the treatment effect by ethnicity, black patients treated with atenolol were at lower risk of experiencing cardiovascular death, heart attack and stroke compared to patients treated with *Cozaar*, even though both drugs lowered blood pressure to a similar degree. In July 2002, the FDA approved a new 4 mg oral granule formulation of *Singulair* for the treatment of asthma in patients between the ages of one and two. In December 2002, the FDA approved *Singulair* for the relief of symptoms of seasonal allergic rhinitis in adults and children as young as two years of age. In January 2003, the FDA approved *Cancidas*, the Company's once-daily intravenous anti-fungal medicine for the treatment of candidemia (bloodstream infection) and the following candida infections: intra-abdominal abscesses, peritonitis (infections within the lining of the abdominal cavity) and pleural space infections (infections within the lining of the lung).

*Acquisitions*—In July 2001, the Company acquired Rosetta Inpharmatics, Inc., a publicly-held Washington based informational genomics company that designs and develops unique technologies to efficiently analyze gene data to predict how medical compounds will interact with different kinds of cells in the body.

In January 2003, the Company, through its wholly owned subsidiary, MSD (Japan) Co., Ltd., launched a tender offer to acquire, for an estimated aggregate purchase price of \$1.5 billion, the remaining 49% of the common shares of Banyu Pharmaceutical Co., Ltd. ("Banyu") that it does not already own. The tender offer was conditional on the Company receiving at least 76.45 million common shares to bring its share ownership of Banyu to approximately 80% or more. On March 7, 2003, the Company announced that at the close of the final count of shares in its tender offer for all remaining shares in Banyu, the Company received tenders for 116,521,207 shares, bringing its ownership to 95% of outstanding Banyu common stock. Japan is the world's second largest pharmaceutical market.

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*Joint Ventures*—In 1982, the Company entered into an agreement with Astra AB (“Astra”) to develop and market Astra products in the United States. In 1994, the Company and Astra formed an equally owned joint venture that developed and marketed most of Astra’s new prescription medicines in the United States including *Prilosec*, the first of a class of medications known as proton pump inhibitors, which slows the production of acid from the cells of the stomach lining.

In 1998, the Company and Astra restructured the joint venture whereby the Company acquired Astra’s interest in the joint venture, renamed KBI Inc. (“KBI”), and contributed KBI’s operating assets to a new U.S. limited partnership named Astra Pharmaceuticals, L.P. (the “Partnership”), in which the Company maintains a limited partner interest. The Partnership, renamed AstraZeneca LP, became the exclusive distributor of the products for which KBI retained rights. The Company earns certain Partnership returns as well as ongoing revenue based on sales of current and future KBI products. The Partnership returns include a priority return provided for in the Partnership Agreement, variable returns based, in part, upon sales of certain former Astra USA, Inc. products, and a preferential return representing the Company’s share of undistributed Partnership GAAP earnings. In conjunction with the 1998 restructuring, for a payment of \$443.0 million, Astra purchased an option to buy the Company’s interest in the KBI products, excluding the Company’s interest in the gastrointestinal medicines *Prilosec* and *Nexium*. The Company also granted Astra an option (the “Shares Option”) to buy the Company’s common stock interest in KBI, at an exercise price based on the net present value of estimated future net sales of *Prilosec* and *Nexium*.

In April 1999, Astra merged with Zeneca Group Plc, forming AstraZeneca AB (“AstraZeneca”). As a result of the merger, in exchange for the Company’s relinquishment of rights to future Astra products with no existing or pending U.S. patents at the time of the merger, Astra paid \$967.4 million, which is subject to a true-up calculation in 2008 that may require repayment of all or a portion of this amount. The merger also triggers a partial redemption of the Company’s limited partner interest in 2008. Furthermore, as a result of the merger, AstraZeneca’s option to buy the Company’s interest in the KBI products is exercisable in 2010 and the Company has the right to require AstraZeneca to purchase such interest in 2008. In addition, the Shares Option is exercisable two years after Astra’s purchase of the Company’s interest in the KBI products.

In 1989, the Company formed a joint venture with Johnson & Johnson to develop, market and manufacture consumer health care products in the United States. This 50% owned joint venture was expanded into Europe in 1993, and into Canada in 1996. The European extension currently markets and sells over-the-counter pharmaceutical products in France, Germany, Italy, Spain and the United Kingdom. Significant joint venture products are *Pepcid AC* (famotidine), an over-the-counter form of the Company’s ulcer medication *Pepcid* (famotidine), as well as *Pepcid Complete*, an over-the-counter product which combines the Company’s ulcer medication with antacids (calcium carbonate and magnesium hydroxide).

Effective April 1992, the Company, through the Merck Vaccine Division, and Connaught Laboratories, Inc. (now Aventis Pasteur), an affiliate of Aventis A.G., agreed to collaborate on the development and marketing of combination pediatric vaccines and to promote selected vaccines in the United States. The research and marketing collaboration enables the companies to pool their resources to expedite the development of vaccines combining several different antigens to protect children against a variety of diseases, including *Haemophilus influenzae* type b, hepatitis B, diphtheria, tetanus, pertussis and poliomyelitis. While combination vaccine development efforts continue under this Agreement, no vaccines are currently being promoted.

In 1994, the Company, through the Merck Vaccine Division, and Pasteur Mérieux Connaught (now Aventis Pasteur) formed a joint venture to market human vaccines in Europe and to collaborate in the development of combination vaccines for distribution in the European Union (“EU”) and the European Free Trade Association. The Company and Aventis Pasteur contributed, among other things, their European vaccine businesses for equal shares in the joint venture, known as Pasteur Mérieux MSD, S.N.C. (now Aventis Pasteur MSD, S.N.C.). The joint venture is subject to monitoring by the EU, to which the partners made certain undertakings in return for an exemption from European Competition Law, effective until December 2006. The joint venture maintains a



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presence, directly or through affiliates or branches in Belgium, Italy, Germany, Spain, France, Austria, Ireland, Sweden and the United Kingdom, and through distributors in the rest of Europe.

In 1997, the Company and Rhône-Poulenc S.A. combined their respective animal health and poultry genetics businesses to form Merial Limited (“Merial”), a fully-integrated animal health company, which is a stand-alone joint venture, equally owned by each party. Merial provides a comprehensive range of pharmaceuticals and vaccines to enhance the health, well-being and performance of a wide range of animal species. In December 1999, Rhône-Poulenc S.A.’s interest in Merial was acquired by Aventis S.A., a corporation formed by the merger of Rhône-Poulenc S.A. and Hoechst A.G.

In May 2000, the Company and Schering-Plough Corporation (“Schering-Plough”) entered into agreements to create separate equally owned partnerships to develop and market in the United States new prescription medicines in the cholesterol-management and respiratory therapeutic areas. In December 2001, the Company and Schering-Plough announced the worldwide expansion (excluding Japan) of the cholesterol-management partnership. Also in December 2001, an entity of the Merck/Schering-Plough Pharmaceuticals partnership submitted a New Drug Application (“NDA”) to the FDA for *Zetia* (ezetimibe) tablets, a cholesterol absorption inhibitor discovered by Schering-Plough, to be administered alone or with statins for the reduction of elevated cholesterol levels. In October 2002, Merck/Schering-Plough Pharmaceuticals announced the FDA approval of *Zetia*. The once-daily tablet of *Zetia* 10 mg was approved for use either by itself or together with a statin to reduce LDL cholesterol and total cholesterol in patients with high cholesterol. Marketing approval was received in October 2002 in Germany under the brand name *Ezetrol* for use alone and with all marketed statins for the treatment of elevated cholesterol levels. In March 2003, Merck/Schering-Plough Pharmaceuticals announced that *Ezetrol* successfully completed the European Union Mutual Recognition Procedure (“MRP”). With the completion of the MRP process, the 15 EU member states, as well as Iceland and Norway, can grant national marketing authorization with unified labeling for *Ezetrol*. In the EU, *Ezetrol* will be indicated in co-administration with a statin as adjunctive therapy to diet for use in patients with primary hypercholesterolemia who are not appropriately controlled with a statin alone. *Ezetrol* as monotherapy will be indicated as adjunctive therapy to diet for use in patients with primary hypercholesterolemia in whom a statin is considered inappropriate or is not tolerated. In addition, *Ezetrol* as monotherapy will be indicated as adjunctive therapy to diet for use in patients with homozygous familial sitosterolemia and co-administered with a statin for use in patients with homozygous familial hypercholesterolemia. The partnerships are also pursuing the development and marketing of *Zetia* as a once-daily combination tablet with *Zocor*.

In January 2002, Merck/Schering-Plough Pharmaceuticals reported on results of Phase III clinical trials of a fixed-combination tablet containing *Singulair* and *Claritin*, Schering-Plough’s non-sedating antihistamine, which did not demonstrate sufficient added benefits in the treatment of seasonal allergic rhinitis.

*Competition*—The markets in which the Company’s pharmaceutical business is conducted are highly competitive and often highly regulated. Such competition involves an intensive search for technological innovations and the ability to market these innovations effectively. With its long-standing emphasis on research and development, the Company is well prepared to compete in the search for technological innovations. Additional resources to meet competition include quality control, flexibility to meet customer specifications, an efficient distribution system and a strong technical information service. The Company is active in acquiring and marketing products through joint ventures and licenses and has been refining its sales and marketing efforts to further address changing industry conditions. To enhance its product portfolio, the Company continues to pursue external alliances, from early-stage to late-stage product opportunities, including joint ventures and targeted acquisitions. However, the introduction of new products and processes by competitors may result in price reductions and product replacements, even for products protected by patents. For example, the number of compounds available to treat diseases typically increases over time and has resulted in slowing the growth in sales of certain of the Company’s products.

In addition, particularly in the area of human pharmaceutical products, legislation enacted in all states in the U.S. allows, encourages or, in a few instances, in the absence of specific instructions from the prescribing

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physician, mandates the use of “generic” products (those containing the same active chemical as an innovator’s product) rather than “brand-name” products. Governmental and other pressures toward the dispensing of generic products have significantly reduced the sales of certain of the Company’s products no longer protected by patents, such as *Vasotec* and *Vaseretic* (enalapril maleate in combination with hydrochlorothiazide), the U.S. rights to which have been sold, *Prinivil* and *Prinzide* (lisinopril in combination with hydrochlorothiazide), *Pepcid* and *Mevacor* (lovastatin), and slowed the growth of certain other products.

Medco Health operates in a very competitive market that is characterized by increasing pricing and margin pressures as clients seek to control the growth in the cost of providing prescription drug benefits to its members. Medco Health competes primarily on the basis of its ability to provide sophisticated programs and services for clients and the members of their pharmacy benefit plans, as well as for the physicians and pharmacies the members use. Medco Health’s programs and services help clients control the cost and enhance the quality of the prescription drug benefits it offers to their members. Medco Health accomplishes this primarily by negotiating competitive pricing from pharmaceutical manufacturers and retail pharmacies and administering prescriptions filled through its national network of retail pharmacies or from its home delivery pharmacies.

*Distribution*—The Company sells its human health products primarily to drug wholesalers and retailers, hospitals, clinics, government agencies and managed health care providers such as health maintenance organizations and other institutions. The Company’s professional representatives communicate the effectiveness, safety and value of the Company’s products to health care professionals in private practice, group practices and managed care organizations. Medco Health sells its pharmacy benefit management services to Blue Cross/Blue Shield plans, managed care organizations, insurance carriers, third-party benefit plan administrators, employers, federal, state and local government agencies, and union-sponsored benefit plans.

*Raw Materials*—Raw materials and supplies are normally available in quantities adequate to meet the needs of the Company’s business.

*Government Regulation and Investigation*—The pharmaceutical industry is subject to global regulation by regional, country, state and local agencies. Of particular importance is the FDA in the United States, which administers requirements covering the testing, approval, safety, effectiveness, manufacturing, labeling and marketing of prescription pharmaceuticals. In many cases, the FDA requirements have increased the amount of time and money necessary to develop new products and bring them to market in the United States. In 1997, the Food and Drug Administration Modernization Act was passed and was the culmination of a comprehensive legislative reform effort designed to streamline regulatory procedures within the FDA and to improve the regulation of drugs, medical devices and food. The legislation was principally designed to ensure the timely availability of safe and effective drugs and biologics by expediting the premarket review process for new products. A key provision of the legislation is the re-authorization of the Prescription Drug User Fee Act of 1992, which permits the continued collection of user fees from prescription drug manufacturers to augment FDA resources earmarked for the review of human drug applications. This helps provide the resources necessary to ensure the prompt approval of safe and effective new drugs.

In recent years, an increasing number of legislative proposals have been introduced or proposed in Congress and in some state legislatures that would effect major changes in the health care system, either nationally or at the state level. Such legislative initiatives introduced in Congress include prescription drug benefit proposals for Medicare beneficiaries. Although a reform bill has not been enacted at the federal level, some states have passed reform legislation and further federal and state developments are expected. Although the Company is well positioned to respond to evolving market forces, it cannot predict the outcome or effect of legislation resulting from these reform efforts.

For many years, the pharmaceutical industry and the pharmacy benefit management business have been under federal and state oversight with the new drug approval system, drug safety, advertising and promotion, drug purchasing and reimbursement programs and formularies variously under review. The Company believes that it will continue to be able to conduct its operations, including the introduction of new drugs to the market, in

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this regulatory environment. One type of federal initiative to contain federal health care spending is the prospective or “capitated” payment system, first implemented to reduce the rate of growth in Medicare reimbursement to hospitals. Such a system establishes in advance a flat rate for reimbursement for health care for those patients for whom the payer is fiscally responsible. This type of payment system and other cost containment systems are now widely used by public and private payers and have caused hospitals, health maintenance organizations and other customers of the Company to be more cost-conscious in their treatment decisions, including decisions regarding the medicines to be made available to their patients. The Company continues to work with private and federal employers to slow increases in health care costs. Further, the Company’s efforts to demonstrate that its medicines can help save costs in other areas, and pricing flexibility across its product portfolio, have encouraged the use of the Company’s medicines and have helped offset the effects of increasing cost pressures.

Also, federal and state governments have pursued methods to directly reduce the cost of drugs for which they pay. For example, federal laws require the Company to pay specified rebates for medicines reimbursed by Medicaid, to provide discounts for outpatient medicines purchased by certain Public Health Service entities and “disproportionate share” hospitals (hospitals meeting certain criteria), and to provide minimum discounts of 24% off of a defined “non-federal average manufacturer price” for purchases by certain components of the federal government such as the Department of Veterans Affairs and the Department of Defense.

Initiatives in some states seek rebates beyond the minimum required by Medicaid legislation, in some cases for patients beyond those who are eligible for Medicaid. Under the Federal Vaccines for Children entitlement program, the U.S. Centers for Disease Control and Prevention (“CDC”) funds and purchases recommended pediatric vaccines at a public sector price for the immunization of Medicaid-eligible, uninsured, native American and certain underinsured children. The Company was awarded CDC contracts in 2002 for the supply of six pediatric vaccines for this program (and a monovalent component of certain of such vaccines).

Outside the United States, the Company encounters similar regulatory and legislative issues in most of the countries where it does business. There, too, the primary thrust of governmental inquiry and action is toward determining drug safety and effectiveness, often with mechanisms for controlling the prices of prescription drugs and the profits of prescription drug companies. The EU has adopted directives concerning the classification, labeling, advertising, wholesale distribution and approval for marketing of medicinal products for human use. The Company’s policies and procedures are already consistent with the substance of these directives; consequently, it is believed that they will not have any material effect on the Company’s business.

The Company is subject to the jurisdiction of various regulatory agencies and is, therefore, subject to potential administrative actions. Such actions may include seizures of products and other civil and criminal sanctions. Under certain circumstances, the Company on its own may deem it advisable to initiate product recalls. The Company believes that it should be able to compete effectively within this environment.

In addition, certain countries within the EU, recognizing the economic importance of the research-based pharmaceutical industry and the value of innovative medicines to society, are working with industry representatives and the European Commission on proposals to complete the “Single Market” in pharmaceuticals and improve the competitive climate through a variety of means including market deregulation.

There has been an increasing amount of focus on privacy issues in countries around the world, including the United States and the EU. In the United States, federal and state governments have pursued legislative and regulatory initiatives regarding patient privacy, including federal and recently issued state privacy regulations concerning health information, which have affected the Company’s operations, particularly at Medco Health.

There are extensive federal and state regulations applicable to the practice of pharmacy and the administration of managed health care programs. Each state in which Medco Health operates a pharmacy has laws and regulations governing its operation and the licensing of and standards of professional practice by its pharmacists. These regulations are issued by an administrative body in each state (typically, a pharmacy board), which is empowered to impose sanctions for noncompliance. The policies and procedures of Medco Health comply with these regulations.

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*Patents, Trademarks and Licenses*—Patent protection is considered, in the aggregate, to be of material importance in the Company’s marketing of human health products in the United States and in most major foreign markets. Patents may cover products *per se*, pharmaceutical formulations, processes for or intermediates useful in the manufacture of products or the uses of products. Protection for individual products extends for varying periods in accordance with the date of grant and 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.

Patent portfolios developed for products introduced by the Company normally provide market exclusivity. Basic patents are in effect for the following major products in the United States: *Aggrastat* (tirofiban hydrochloride), *Arcoxia*, *Cancidas*, *Comvax* (haemophilus b conjugate and hepatitis B [recombinant] vaccine), *Cosopt*, *Cozaar*, *Crixivan*, *Fosamax*, *Hyzaar*, *Invanz*, *Maxalt* (rizatriptan benzoate), *PedvaxHIB* (haemophilus b conjugate vaccine), *Primaxin*, *Propecia* (finasteride), *Proscar*, *Recombivax HB*, *Singulair*, *Timoptic-XE* (timolol maleate ophthalmic gel forming solution), *Trusopt*, *Vioxx* and *Zocor*. A basic patent is also in effect in the United States for *Zetia*, which was developed by the Merck/Schering-Plough Pharmaceuticals partnership. A basic patent is also in effect for *Sustiva/Stocrin* (efavirenz). Bristol-Myers Squibb, under an exclusive license from the Company, sells *Sustiva* in the United States, Canada and certain European countries. The Company markets *Stocrin* in other countries throughout the world.

In 2003, *Zocor* will lose its basic patent protection in Canada and certain countries in Europe, including the United Kingdom and Germany, and the Company expects a decline in *Zocor* sales in those countries.

The FDA Modernization Act of 1997 (the “Modernization Act”), includes a Pediatric Exclusivity Provision that may provide an additional six months of market exclusivity in the United States for indications of new or currently marketed drugs, if certain agreed upon pediatric studies are completed by the applicant. These exclusivity provisions were re-authorized until October 1, 2007 by the “Best Pharmaceuticals for Children Act” passed in January 2002. The FDA granted an additional six months of market exclusivity in the United States to *Cozaar* until February 2010, to *Singulair* until August 2012, and to *Zocor* until June 2006.

While the expiration of a product patent normally results in a loss of market exclusivity for the covered product, commercial benefits may continue to be derived from: (i) later-granted patents on processes and intermediates related to the most economical method of manufacture of the active ingredient of such product; (ii) patents relating to the use of such product; (iii) patents relating to novel compositions and formulations; and (iv) in the United States, market exclusivity that may be available under federal law. The effect of product patent expiration also depends upon many other factors such as the nature of the market and the position of the product in it, the growth of the market, the complexities and economics of the process for manufacture of the active ingredient of the product and the requirements of new drug provisions of the Federal Food, Drug and Cosmetic Act or similar laws and regulations in other countries.

Additions to market exclusivity are sought in the United States and other countries through all relevant laws, including laws increasing patent life. Some of the benefits of increases in patent life have been partially offset by a general increase in the number of, incentives for and use of generic products. Additionally, improvements in intellectual property laws are sought in the United States and other countries through reform of patent and other relevant laws and implementation of international treaties.

Worldwide, all of the Company’s important products are sold under trademarks that are considered in the aggregate to be of material importance. Trademark protection continues in some countries as long as used; in other countries, as long as registered. Registration is for fixed terms and can be renewed indefinitely.

Royalties received during 2002 on patent and know-how licenses and other rights amounted to \$74.6 million. The Company also paid royalties amounting to \$537.0 million in 2002 under patent and know-how licenses it holds.

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*Divestitures*—In 2002, the Company sold its U.S. rights in *Vasotec*, *Vaseretic*, and *Vasotec I.V. Injection* (enalaprilat) to Biovail Laboratories Incorporated (“Biovail”), a subsidiary of Biovail Corporation. At the same time, the Company’s Canadian subsidiary, Merck Frosst Canada & Co. (“Merck Frosst”) and Biovail entered into a supply agreement under which Merck Frosst agreed to supply Biovail for a minimum of five years with bulk tablets of formulated enalapril maleate and enalapril maleate in combination with hydrochlorothiazide for distribution by Biovail in the United States as *Vasotec* and *Vaseretic*. The basic product patents on *Vasotec* and *Vaseretic* had expired in the United States prior to these transactions.

## Research and Development

The Company’s business is characterized by the introduction of new products or new uses for existing products through a strong research and development program. Approximately 12,500 people are employed in the Company’s research activities. Expenditures for the Company’s research and development programs were \$2.7 billion in 2002, \$2.5 billion in 2001 and \$2.3 billion in 2000 and are estimated to grow 10% to 12% over the full-year 2002 expense in 2003. The Company maintains its ongoing commitment to research over a broad range of therapeutic areas and clinical development in support of new products. Total expenditures for the period 1993 through 2002 exceeded \$18.2 billion with a compound annual growth rate of 9%.

The Company maintains a number of long-term exploratory and fundamental research programs in biology and chemistry as well as research programs directed toward product development. Projects related to human health are being carried on in various fields such as bacterial and viral infections, cardiovascular functions, cancer, diabetes, pain and inflammation, kidney function, obesity, mental health, the nervous system, ophthalmic research, prostate therapy, the respiratory system, fungal diseases, bone diseases, endoparasitic and ectoparasitic diseases, companion animal diseases and production improvement.

In the development of human health products, industry practice and government regulations in the United States and most foreign countries provide for the determination of effectiveness and safety of new chemical compounds through preclinical tests and controlled clinical evaluation. Before a new drug may be marketed in the United States, recorded data on preclinical and clinical experience are included in the NDA or the biological Product License Application to the FDA for the required approval. The development of certain other products is also subject to government regulations covering safety and efficacy in the United States and many foreign countries. There can be no assurance that a compound that is the result of any particular program will obtain the regulatory approvals necessary for it to be marketed.

On February 6, 2003, the Company announced that it was discontinuing Phase II clinical trials for its lead GABA-A  $\alpha_2/\alpha_3$  agonist compound for the treatment of generalized anxiety. The Company is continuing its research in the field of anxiety through the ongoing study of other GABA agonist molecules. The timing for the development of these other molecules is not certain.

On February 21, 2003, Banyu announced a change of timing with respect to the filing in Japan of an NDA for rofecoxib (*Vioxx*). In its press release, Banyu stated that after reviewing clinical data accumulated to date, and at the recommendation of the Organization of Pharmaceutical Safety and Research, Banyu has agreed to conduct additional studies in Japanese patients to further support the NDA filing. As a result of this decision, the NDA filing which was originally planned to take place by the end of March 2003 has been delayed. Banyu further stated that it will conduct the additional studies as appropriate in support of filing the product.

New product candidates resulting from the Company’s research and development programs include *Arcoxia*, a second COX-2 specific inhibitor potentially useful for the treatment of osteoarthritis, rheumatoid arthritis, acute pain, chronic pain and dysmenorrhea, for which the Company filed an NDA with the FDA on August 8, 2001. On March 13, 2002, the Company withdrew the original U.S. NDA for the investigational medicine. The Company announced in June 2002 plans to refile an expanded NDA for *Arcoxia* with the FDA in the second half of 2003. The Company plans to seek indications for ankylosing spondylitis (a chronic autoimmune disease)

primarily involving the spine), osteoarthritis, rheumatoid arthritis, chronic pain, dysmenorrhea and acute gouty arthritis. To enhance its filing for the broad range of acute pain indications, the Company will provide data in the NDA from several ongoing studies on *Arcoxia* in acute pain. In response to the FDA's request, the expanded NDA also will include additional cardiovascular safety data for *Arcoxia* versus a non-naproxen non-steroidal anti-inflammatory drug ("NSAID"). The Company is conducting large clinical trials to obtain cardiovascular safety data. With the completion of the European Union's Mutual Recognition Procedure in 2002, which excluded France and Germany, national authorizations are being granted for *Arcoxia* by the remaining EU member states, as well as Norway and Iceland, as a once-daily treatment for osteoarthritis, rheumatoid arthritis and acute gouty arthritis. *Arcoxia* was launched in 19 countries in 2002, including several in Europe, Latin America and the Asia Pacific region, and is expected to be launched in other countries throughout 2003.

In 2002, France referred all COX-2 specific inhibitor compounds ("coxibs") on the market or under regulatory review at the time of the referral to the Committee for Proprietary Medicinal Products, the European scientific regulatory agency, to review the gastrointestinal and cardiovascular safety of the coxib class. The Transparency Commission, responsible for drug listing in the pricing and reimbursement process in France, is currently re-evaluating the medical benefit of marketed coxibs versus traditional NSAIDs.

Another product candidate is *Emend* (aprepitant), an oral compound potentially useful for the prevention of highly emetogenic chemotherapy-induced nausea and vomiting. On March 6, 2003, the Gastrointestinal Drugs Advisory Committee of the FDA reviewed clinical data on *Emend*. The Advisory Committee unanimously agreed that *Emend* in combination with standard antiemetic therapy demonstrated efficacy in the prevention of nausea and vomiting in both the acute and delayed phase following highly emetogenic chemotherapy. The Advisory Committee recommended post-marketing studies to gather additional information about the safety profile of the *Emend* regimen in patients receiving certain chemotherapeutic agents. The Advisory Committee was not asked to vote on whether it recommended *Emend* for approval.

Products in Phase III clinical development include an oral compound potentially useful for the treatment of depression and other neuropsychiatric diseases; a compound potentially useful for the treatment of diabetic glucose control and diabetic dyslipidemia; and certain new vaccines including a Human Papillomavirus vaccine ("HPV"), potentially useful to prevent HPV infection; a rotavirus vaccine, potentially useful for the prevention of infant diarrhea and dehydration caused by rotavirus; and a shingles (zoster) vaccine, potentially useful for the prevention of herpes/zoster and/or post herpetic neuralgia, a debilitating pain condition associated with zoster. There are competing claims to intellectual property in the HPV field, but the Company is confident that the claims will not delay the Company's program. A compound potentially useful for the treatment of Chronic Obstructive Pulmonary Disease and asthma is in Phase II clinical development. The Company is now in Phase I clinical trials for a vaccine and a compound potentially useful for the treatment of HIV/AIDS. In addition, the Company has demonstrated pharmacological proof-of-concept in humans – a key biomarker in determining whether to move forward in clinical development – with new compounds in cancer, Alzheimer's disease, obesity, and diabetes.

All product or service marks appearing in type form different from that of the surrounding text are trademarks or service marks owned by or licensed to Merck & Co., Inc., its subsidiaries or affiliates (including *Zetta*, a trademark owned by an entity of the Merck/Schering-Plough Pharmaceuticals partnership). *Cozaar* and *Hyzaar* are registered trademarks of E.I. du Pont de Nemours and Company, Wilmington, DE. *Claritin* is a trademark of Schering Corporation and *Prilosec* and *Nexium* are trademarks of the AstraZeneca group. The U.S. trademarks for *Vasotec* and *Vaseretic* are owned by Biovail Laboratories Incorporated.

## Employees

At the end of 2002, the Company had 62,000 employees worldwide, with 33,400 employed in the United States, including Puerto Rico. In addition, Medco Health had 15,300 employees, all of whom are employed in the United States. Approximately 23% and 49% of worldwide employees of the Company and Medco Health, respectively, are represented by various collective bargaining groups.

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## Environmental Matters

The Company believes that it is in compliance in all material respects with applicable environmental laws and regulations. In 2002, the Company incurred capital expenditures of approximately \$186.7 million for environmental protection facilities. Capital expenditures for this purpose are forecasted to exceed \$525.0 million for the years 2003 through 2007. In addition, the Company's operating and maintenance expenditures for environmental protection facilities were approximately \$87.8 million in 2002. Expenditures for this purpose for the years 2003 through 2007 are forecasted to approximate \$515.0 million. The Company is also remediating environmental contamination resulting from past industrial activity at certain of its sites. Expenditures for remediation and environmental liabilities were \$31.1 million in 2002, and are estimated at \$107.0 million for the years 2003 through 2007. These amounts do not consider potential recoveries from insurers or other parties. The Company has taken an active role in identifying and providing for these costs, and in management's opinion, the liabilities for all environmental matters which are probable and reasonably estimable have been accrued. Although it is not possible to predict with certainty the outcome of these environmental matters, or the ultimate costs of remediation, management does not believe that any reasonably possible expenditures that may be incurred in excess of those provided should result in a material adverse effect on the Company's financial position, results of operations, liquidity or capital resources.

## Cautionary Factors that May Affect Future Results

(Cautionary Statements Under the Private Securities Litigation Reform Act of 1995)

This report and other written reports and oral statements made from time to time by the Company may contain so-called "forward-looking statements," all of which are subject to risks and uncertainties. One can identify these forward-looking statements by their use of words such as "expects," "plans," "will," "estimates," "forecasts," "projects" and other words of similar meaning. One can also identify them by the fact that they do not relate strictly to historical or current facts. These statements are likely to address the Company's growth strategy, financial results, product approvals and development programs, as well as the proposed initial public offering, and eventual divestiture of our Medco Health subsidiary. One must carefully consider any such statement and should understand that many factors could cause actual results to differ from the Company's forward-looking statements. These factors include inaccurate assumptions and a broad variety of other risks and uncertainties, including some that are known and some that are not. No forward-looking statement can be guaranteed and actual future results may vary materially. Although it is not possible to predict or identify all such factors, they may include the following:

- Generic competition as product patents for several products have recently expired in the United States and other countries, including product patents for *Mevacor* (U.S.—2001), *Prinivil and Prinzide* (U.S.—2001) and *Vaseretic* (U.S.—2001). Also in 2003, *Zocor* will lose its basic patent protection in Canada, and certain countries in Europe, including the United Kingdom and Germany. In addition, the U.S. patent covering omeprazole, the active ingredient in *Prilosec*, which the Company supplies exclusively to AstraZeneca LP, expired in 2001, and a trial court held in October 2002 that one generic company's omeprazole product does not infringe the Company's formulation patents with respect to *Prilosec*. Under an agreement with AstraZeneca, the Company receives supply payments at predetermined rates on the U.S. sales of certain products by AstraZeneca, most notably *Prilosec* and *Nexium*. The Company anticipates that the total supply payments that the Company receives from AstraZeneca will decline in 2003 at a mid-single digit percentage rate.
- The income contribution related to the Company's collaboration with Schering-Plough will continue to be negative in 2003. This reflects that sales of ezetimibe will be more than offset by launch expenses for the product and ongoing joint venture research and development spending.
- Increased "brand" competition in therapeutic areas important to the Company's long-term business performance.
- The difficulties and uncertainties inherent in new product development. The outcome of the lengthy and complex process of new product development is inherently uncertain. A candidate can fail at any stage.

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of the process and one or more late-stage product candidates could fail to receive regulatory approval. New product candidates may appear promising in development but fail to reach the market because of efficacy or safety concerns, the inability to obtain necessary regulatory approvals, the difficulty or excessive cost to manufacture and/or the infringement of patents or intellectual property rights of others. Furthermore, the sales of new products may prove to be disappointing and fail to reach anticipated levels.

- Pricing pressures, both in the United States and abroad, including rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and health care reform, pharmaceutical reimbursement and pricing in general.
- Changes in government laws and regulations and the enforcement thereof affecting the Company's pharmaceutical, vaccine and/or pharmacy benefit management businesses.
- Efficacy or safety concerns with respect to marketed products, whether or not scientifically justified, leading to product recalls, withdrawals or declining sales.
- Legal factors, including product liability claims, antitrust litigation and governmental investigations, environmental concerns and patent disputes with branded and generic competitors, any of which could preclude commercialization of products or negatively affect the profitability of existing products.
- Lost market opportunity resulting from delays and uncertainties in the approval process of the FDA and foreign regulatory authorities.
- Increased focus on privacy issues in countries around the world, including the United States and the EU. In the United States, federal and state governments have pursued legislative and regulatory initiatives regarding patient privacy, including federal and recently issued state privacy regulations concerning health information, which have affected the Company's operations, particularly at Medco Health.
- Changes in tax laws including changes related to the taxation of foreign earnings, as well as the impact of legislation capping and ultimately repealing Section 936 of the Internal Revenue Code (relating to earnings from the Company's Puerto Rican operations).
- Changes in accounting pronouncements promulgated by standard-setting or regulatory bodies, including the Financial Accounting Standards Board and the Securities and Exchange Commission, that are adverse to the Company.
- There is a risk that the initial public offering and divestiture of our interest in Medco Health may not be completed due to economic and stock market conditions generally or particularly with respect to the pharmacy benefit management industry, tax considerations, or failure to meet other customary conditions.
- Economic factors over which the Company has no control, including changes in inflation, interest rates and foreign currency exchange rates.

This list should not be considered an exhaustive statement of all potential risks and uncertainties.

### **Geographic Area and Segment Information**

The Company's operations outside the United States are conducted primarily through subsidiaries. Sales of the Company's human health products by subsidiaries outside the United States were 39% of the Company's human health sales in 2002, and 37% and 36% in 2001 and 2000, respectively.

The Company's worldwide business is subject to risks of currency fluctuations, governmental actions and other governmental proceedings abroad. The Company does not regard these risks as a deterrent to further expansion of its operations abroad. However, the Company closely reviews its methods of operations and adopts strategies responsive to changing economic and political conditions.



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In recent years, the Company has been expanding its operations in countries located in Latin America, the Middle East, Africa, Eastern Europe and Asia Pacific where changes in government policies and economic conditions are making it possible for the Company to earn fair returns. Business in these developing areas, while sometimes less stable, offers important opportunities for growth over time.

Financial information about geographic areas and operating segments of the Company's business is incorporated by reference to pages 52 (beginning with the caption "Segment Reporting") and 53 of the Company's 2002 Annual Report to stockholders.

## **Other Matters**

The Board of Directors of the Company has determined that Dr. Heidi G. Miller, who currently is the Executive Vice President and Chief Financial Officer of Bank One Corporation, and who previously was the chief financial officer for three different public companies, is the audit committee financial expert. The Board of Directors made a qualitative assessment of Dr. Miller's level of knowledge and experience based on a number of factors, including her formal education and experience as chief financial officer for reporting companies. The Board of Directors has also determined that Dr. Miller is independent of management.

The Company will make available free of charge on its Internet website its Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission. The Company's Internet website address is [www.merck.com](http://www.merck.com).

## **Item 2. Properties.**

The Company's corporate headquarters is located in Whitehouse Station, New Jersey. The Company's pharmaceutical business is conducted through divisional headquarters located in Upper Gwynedd and West Point, Pennsylvania. Principal research facilities for human health products are located in Rahway, New Jersey and West Point. The Company also has production facilities for human health products at nine locations in the United States and Puerto Rico. Branch warehouses provide services throughout the country. Outside the United States, through subsidiaries, the Company owns or has an interest in manufacturing plants or other properties in Australia, Canada, countries in Western Europe, Central and South America, Africa and Asia. Medco Health operates its primary businesses through its headquarters located in Franklin Lakes, New Jersey, and through owned or leased facilities in various locations throughout the United States.

Capital expenditures for 2002 were \$2,369.7 million compared with \$2,724.7 million for 2001. In the United States, these amounted to \$1,806.7 million for 2002 and \$2,128.6 million for 2001. Abroad, such expenditures amounted to \$563.0 million for 2002 and \$596.1 million for 2001.

The Company and its subsidiaries own their principal facilities and manufacturing plants under titles which they consider to be satisfactory. The Company considers that its properties are in good operating condition and that its machinery and equipment have been well maintained. Plants for the manufacture of products are suitable for their intended purposes and have capacities and projected capacities adequate for current and projected needs for existing Company products. Some capacity of the plants is being converted, with any needed modification, to the requirements of newly introduced and future products.

## **Item 3. Legal Proceedings.**

The Company is involved in various claims and legal proceedings of a nature considered normal to its business, including product liability, intellectual property, and commercial litigation, as well as additional matters such as antitrust actions.

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The Company, including Medco Health, is party to a number of antitrust suits, certain of which have been certified as class actions, instituted by most of the nation's retail pharmacies and consumers in several states, alleging conspiracies in restraint of trade and challenging the pricing and/or purchasing practices of the Company and Medco Health, respectively. A significant number of other pharmaceutical companies and wholesalers have also been sued in the same or similar litigation. In 1994, these actions, except for several actions pending in state courts, were consolidated for pre-trial purposes in the United States District Court for the Northern District of Illinois. In 1996, the Company and several other defendants finalized an agreement to settle the federal class action alleging conspiracy, which represents the single largest group of retail pharmacy claims. Since that time, the Company has entered into other settlements on satisfactory terms. In October 2001, the Judicial Panel on Multi-District Litigation ("Panel") determined that consolidated pretrial proceedings in federal district court in Chicago were substantially completed. The Panel ordered that all of the federal antitrust conspiracy cases, several of which have not been settled by the Company, be returned to the federal district courts in which each case was originally filed. The cases were returned to those courts (and many have since been transferred to the federal court in Brooklyn, New York) for further proceedings. The Company has not engaged in any conspiracy and no admission of wrongdoing was made nor included in any settlement agreements. While it is not feasible to predict the final outcome of the remaining proceedings, in the opinion of the Company, such proceedings should not ultimately result in any liability which would have a material adverse effect on the financial position, liquidity or results of operations of the Company.

As previously disclosed, the Company has been advised by the U.S. Department of Justice that it is investigating marketing and selling activities of the Company and other pharmaceutical manufacturers. The Company will be working with the government to respond appropriately to informational requests.

The Company was joined in ongoing litigation alleging manipulation by pharmaceutical manufacturers of Average Wholesale Prices ("AWP"), which are sometimes used in calculations that determine public and private sector reimbursement levels. In 2002, the Judicial Panel on Multi-District Litigation ordered the transfer and consolidation of all pending federal AWP cases to federal court in Boston, Massachusetts. Plaintiffs filed one consolidated class action complaint which aggregated the claims previously filed in various federal district court actions and also expanded the number of manufacturers to include some which, like the Company, had not been defendants in any prior pending case. The Company's motion to dismiss the case is now pending before the court in Boston. In addition, the Company and thirty other pharmaceutical manufacturers were recently named in a similar complaint filed in federal court in New York, New York by the County of Suffolk. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

In January 2003, the U.S. Department of Justice notified the federal court in New Orleans, Louisiana that it was not going to intervene in a pending Federal False Claims Act case that was filed under seal in December 1999 against the Company. The court issued an order unsealing the complaint, which was filed by a physician in Louisiana, and ordered that the complaint be served. The complaint alleges that the Company's discounting of *Pepcid* in certain Louisiana hospitals led to increases in costs to Medicaid. The Company believes that the complaint is completely without merit and will vigorously defend against it.

A previously reported dispute between the Company and Pharmacia Corporation ("Pharmacia") over competing claims to patent rights to the class of compounds that include rofecoxib, the active ingredient in *Vioxx*, has been settled on a worldwide basis by the parties. As a result, the Company will maintain its worldwide exclusive patent rights to *Vioxx*.

A number of federal and state lawsuits, involving individual claims as well as purported class actions, have been filed against the Company with respect to *Vioxx*. Some of the lawsuits also name as defendants Pfizer Inc. and Pharmacia, which market a competing product. Certain of the lawsuits include allegations regarding gastrointestinal bleeding and cardiovascular events. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

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The Company is a party in claims brought under the Consumer Protection Act of 1987 in the United Kingdom which allege that certain children suffer from a variety of conditions as a result of being vaccinated with various bivalent vaccines for measles and rubella or trivalent vaccines for measles, mumps and rubella, including the Company's *M-M-R II*. Other pharmaceutical companies have also been sued. The claimants allege various adverse consequences, including autism, with or without inflammatory bowel disease, epilepsy, diabetes, encephalitis, encephalopathy and chronic fatigue syndrome. Eight lead cases have been selected for a trial scheduled to commence in April 2004: two against the Company, and six against the other companies. The trial of the eight cases is initially limited to issues of causation and defect on the conditions of autistic spectrum disorders, with or without inflammatory bowel disease. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is also a party to individual and class action product liability lawsuits and claims in the United States involving pediatric vaccines (i.e., hepatitis B vaccine and haemophilus influenza type b vaccine) that contained thimerosal, a preservative used in vaccines. Other defendants include vaccine manufacturers who produced pediatric vaccines containing thimerosal as well as manufacturers of thimerosal. In these actions, the plaintiffs allege, among other things, that they have suffered neurological and other injuries as a result of having thimerosal introduced into their developing bodies. The Company has been successful in having many of these cases either dismissed or stayed on the ground that the National Vaccine Injury Compensation Program ("NVICP") prohibits any person from filing or maintaining a civil action seeking damages against a vaccine manufacturer for vaccine-related injuries unless a petition is first filed in the United States Court of Federal Claims. A number of similar cases (*M-M-R II* alone and/or thimerosal-containing vaccines) have been filed in the United States Court of Federal Claims under the NVICP. The procedure being used to process these cases contemplates a decision on general causation issues by July 2004. The Company believes that these lawsuits and claims are completely without merit and will vigorously defend against them in the proceedings in which it is a party.

From time to time, generic manufacturers of pharmaceutical products file Abbreviated New Drug Applications ("ANDAs") with the FDA seeking to market generic forms of Company products prior to the expiration of relevant patents owned by the Company. Generic pharmaceutical manufacturers have submitted ANDAs to the FDA seeking to market in the United States a generic form of *Fosamax* and *Prilosec* prior to the expiration of the Company's (and AstraZeneca's in the case of *Prilosec*) patents concerning these products. The generic companies' ANDAs include allegations of non-infringement, invalidity and unenforceability of the patents. Generic manufacturers have received FDA approval to market a generic form of *Prilosec*. The Company has filed patent infringement suits in federal court against companies filing ANDAs for generic alendronate, and AstraZeneca and the Company have filed patent infringement suits in federal court against companies filing ANDAs for generic omeprazole. In the case of alendronate, similar patent challenges exist in certain foreign jurisdictions. The Company intends to vigorously defend its patents, which it believes are valid, against infringement by generic companies attempting to market products prior to the expiration dates of such patents. As with any litigation, there can be no assurance of the outcomes, which, if adverse, could result in significantly shortened periods of exclusivity for these products.

A trial in the United States with respect to the alendronate daily product concluded in November 2001. In November 2002, a decision was issued by the District Court in Delaware finding the Company's patent valid and infringed. An appeal has been filed by the defendants. A trial in the United States involving the alendronate weekly product was held in March 2003. A decision is expected in 2003. On January 21, 2003, the High Court of Justice for England and Wales held that patents of the Company protecting the alendronate daily and weekly products are invalid in the United Kingdom. The Company is proceeding with an appeal of this decision.

In the case of omeprazole, the trial court in the United States rendered an opinion in October 2002 upholding the validity of the Company's and AstraZeneca's patents covering the stabilized formulation of omeprazole and ruling that one defendant's omeprazole product did not infringe those patents. The other three defendants' products were found to infringe the formulation patents. Appeals have been filed by all parties in the trial. With respect to certain other generic manufacturers' omeprazole products, no trial date has yet been set.

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As previously disclosed, the Company has been named as a defendant in a number of purported class action lawsuits and in two shareholder derivative actions, all relating to the Company's revenue recognition practice for retail copayments paid by individuals to whom Medco Health provides pharmaceutical benefits. Recently, the class action lawsuits were consolidated and amended to assert claims against the Company and Medco Health and certain of their officers and directors relating to the Company's revenue recognition practices for retail co-payments, rebates received by Medco Health, and Medco Health's independent status. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is a party to a number of proceedings brought under the Comprehensive Environmental Response, Compensation and Liability Act, commonly known as Superfund and other federal and state equivalents. These proceedings seek to require the operators of hazardous waste disposal facilities, transporters of waste to the sites and generators of hazardous waste disposed of at the sites to clean up the sites or, to reimburse the government for cleanup costs. The Company has been made a party to these proceedings as an alleged generator of waste disposed of at the sites. In each case, the government alleges that the defendants are jointly and severally liable for the cleanup costs. Although joint and several liability is alleged, these proceedings are frequently resolved so that the allocation of cleanup costs among the parties more nearly reflects the relative contributions of the parties to the site situation. The Company's potential liability varies greatly from site to site. For some sites the potential liability is *de minimis* and for others the costs of cleanup have not yet been determined. While it is not feasible to predict the outcome of many of these proceedings brought by federal or state agencies or private litigants, in the opinion of the Company, such proceedings should not ultimately result in any liability which would have a material adverse effect on the financial position, results of operations, liquidity or capital resources of the Company. The Company has taken an active role in identifying and providing for these costs and such amounts do not include any reduction for anticipated recoveries of cleanup costs from insurers, former site owners or operators or other recalcitrant potentially responsible parties.

#### *Medco Health*

Recently, the Company and Medco Health agreed to settle, on a class action basis, a series of lawsuits asserting violations of the Employee Retirement Income Security Act ("ERISA"). The Company, Medco Health and certain plaintiffs' counsel filed the settlement with the federal district court in New York, where plaintiffs from six pharmaceutical benefit plans for which Medco Health is the pharmacy benefit manager had filed cases. The proposed class action settlement has been agreed to by plaintiffs in five of the initial six cases (the "Gruer Cases") filed against Medco Health and the Company. Under the proposed settlement, which the court has not yet preliminarily approved, the Company and Medco Health have agreed to pay \$42.5 million and Medco Health has agreed to change or to continue certain specified business practices for a period of five years. The financial compensation is intended to benefit members of the settlement class, which includes, among others, ERISA plans for which Medco Health administered a pharmacy benefit at any time since December 17, 1994. If the settlement is preliminarily approved, the class member plans will have the opportunity to participate in or opt out of the settlement. The court will also schedule a hearing for the purpose of determining the fairness of the settlement to class members. One of the initial plaintiffs and a group of lawyers that has filed additional ERISA lawsuits against the Company and Medco Health are expected to oppose the settlement. The settlement becomes final only if and when the district court grants final approval and all appeals have been resolved. Medco Health and the Company agreed to the proposed settlement in order to avoid the significant cost and distraction of protracted litigation.

The Gruer Cases, which are similar to claims against other pharmaceutical benefit managers in other pending cases, alleged that Medco Health should be treated as a "fiduciary" under ERISA and that Medco Health had breached a fiduciary duty to the benefit plans. The amended complaints in the Gruer Cases also alleged that the Company and Medco Health violated ERISA by using Medco Health to increase the Company's market share and by entering into certain "prohibited transactions" with each other that favor the Company's products. The plaintiffs demanded that Medco Health and the Company turn over any unlawfully obtained profits to a trust to be set up for the benefit plans. One of the plaintiffs has indicated that it may amend its complaint against Medco Health and others to allege violations of the Sherman Act, the Clayton Act and various states' antitrust laws due

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to alleged conspiracies to suppress price competition and unlawful combinations allegedly resulting in higher pharmaceutical prices.

Similar complaints against Medco Health and the Company, which also assert claims of breach of fiduciary duty under ERISA, have been filed in six additional actions by plan participants, purportedly on behalf of their plans and, in some of the actions, similarly-situated self-funded plans. Class action status is being sought in one of the actions. The plans themselves, which could decide to opt out of or participate in the proposed settlement discussed above, are not parties to these lawsuits. An amended complaint in one of the actions alleges that various activities of the Company and Medco Health violate federal and state racketeering laws. In addition, a proposed class action complaint against Medco Health and the Company has also been filed by trustees of one benefit plan. The complaints in these actions rely on many of the same theories as the litigation discussed above.

Two lawsuits based on many of the same allegations are also pending against Medco Health in federal court in California and state court in New Jersey. The theory of liability in the former action, in which the Company is also a defendant, is based on a California statute prohibiting unfair business practices. The plaintiff, who purports to sue on behalf of the general public of California, seeks injunctive relief and disgorgement of the revenues that were allegedly improperly received by the Company and Medco Health. The theory of liability in the New Jersey action is based on a New Jersey consumer protection statute. The plaintiff, which purports to represent a class of similarly-situated non-ERISA plans, seeks compensatory and treble damages. The New Jersey court has dismissed the New Jersey action, but it may be re-initiated under certain circumstances.

Medco Health and the Company believe that these cases are completely without merit, Medco Health is not a “fiduciary” within the meaning of ERISA, and neither the Company nor Medco Health has violated ERISA, the California unfair business practices law, or the New Jersey consumer protection law. Medco Health and the Company intend to vigorously defend against the remaining claims.

As previously disclosed, on August 16, 2002, Medco Health received a letter from the Civil Division of the United States Attorney’s Office for the Eastern District of Pennsylvania relating to its ongoing investigation of the pharmacy benefit management industry. In the letter, the government provided Medco Health with a preliminary assessment of its investigation and summarized the remedies the government could seek if it could prove violations of the law. From the Company’s standpoint, the letter did not raise any significant new issues.

Also in the letter, the government stated that it was preparing to decide whether to intervene in the qui tam (whistleblower) actions pending in the Eastern District of Pennsylvania against Medco Health, which have been previously disclosed. The government’s letter specifically stated that it was not issuing a formal demand, an offer to settle, or a settlement recommendation.

Medco Health believes its practices comply with all legal requirements. Medco Health is continuing to engage in a dialogue with the government with respect to this matter.

There are various other legal proceedings, involving the Company or Medco Health, principally product liability and intellectual property suits involving the Company, which are pending. While it is not feasible to predict the outcome of these proceedings, in the opinion of the Company, all such proceedings are either adequately covered by insurance or, if not so covered, should not ultimately result in any liability which would have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health. In addition, from time to time, federal or state regulators seek information about practices in the industries in which the Company and Medco Health operate. While it is not feasible to predict the outcome of any requests for information, the Company and Medco Health do not expect such inquiries to have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health.

**Item 4. Submission of Matters to a Vote of Security Holders.**

Not applicable.

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**Executive Officers of the Registrant (as of March 15, 2003)**

RAYMOND V. GILMARTIN — Age 62

June, 1994 — Chairman of the Board (since November, 1994), President and Chief Executive Officer

DAVID W. ANSTICE — Age 54

January, 2003 — President, Human Health — responsible for the Company's prescription drug business in Japan, Latin America, Canada, Australia, New Zealand and the Company's joint venture relationship with Schering-Plough

March, 2001 — President, The Americas and U.S. Human Health — responsible for one of the two prescription drug divisions comprising U.S. Human Health, as well as the Company's prescription drug business in Canada and Latin America, and the Company's joint venture relationship with Schering-Plough

January, 1997 — President, Human Health-The Americas — responsible for the Company's human health business in the United States, Canada and Latin America

MARCIA J. AVEDON — Age 41

January, 2003 — Senior Vice President, Human Resources

September, 2002 — Vice President, Talent Management and Organization Effectiveness

Prior to September, 2002, Dr. Avedon held several senior human resources positions (1995 to 2002) at Honeywell International (diversified manufacturing and technology company)

ROBERT H. BOISCLAIR — Age 55

January, 2003 — Acting President, Merck Manufacturing Division (MMD)

March, 1997 — Senior Vice President, Operations, The Americas, MMD

RICHARD T. CLARK — Age 57

January, 2003 — Chairman, President and Chief Executive Officer, Medco Health Solutions, Inc., formerly Merck-Medco Managed Care, L.L.C. (Medco Health), a wholly-owned subsidiary of the Company

January, 2000 — President, Medco Health

June, 1997 — Executive Vice President/Chief Operating Officer, Medco Health

CELIA A. COLBERT — Age 46

January, 1997 — Vice President, Secretary (since September, 1993) and Assistant General Counsel (since November, 1993)

August, 2002 — Vice President and Treasurer — responsible for the Company's treasury and tax functions, and for providing financial support for the Merck Manufacturing and Merck Research Laboratories Divisions as well as Human Resources

September, 1999 — Vice President and Treasurer — responsible for the Company's treasury and tax functions and for providing financial support for the Asia Pacific Division

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February, 1999 — Vice President and Treasurer — responsible for the Company's treasury and tax functions

January, 1997 — Vice President and Treasurer (since January, 1994)

KENNETH C. FRAZIER — Age 48

December, 1999 — Senior Vice President and General Counsel — responsible for legal and public affairs functions and The Merck Company Foundation (a not-for-profit charitable organization affiliated with the Company)

January, 1999 — Vice President and Deputy General Counsel

January, 1997 — Vice President, Public Affairs (since April, 1994) and Assistant General Counsel — responsible for public affairs, corporate legal activities and The Merck Company Foundation

RICHARD C. HENRIQUES JR. — Age 47

August, 2002 — Vice President, Controller — responsible for the Corporate Controller's Group and providing financial support for the Human Health operations in the United States, Canada, Latin America, Europe, the Middle East, Africa, Japan, and Australia/New Zealand and the Merck Vaccine Division (MVD)

November, 2000 — Vice President, Controller — responsible for the Corporate Controller's Group and providing financial support for U.S. Human Health, Canada and Latin America (The Americas) and MVD

February, 1999 — Vice President, Controller — responsible for the Corporate Controller's Group and providing financial support for The Americas

January, 1998 — Vice President & Controller (since January, 1997), The Americas

PETER S. KIM — Age 44

January, 2003 — President, Merck Research Laboratories (MRL)

February, 2001 — Executive Vice President, Research and Development, MRL

Prior to February, 2001, Dr. Kim served as Member of the Whitehead Institute (1985 – 2001), Professor of Biology at the Massachusetts Institute of Technology (1988 – 2001), and Investigator of the Howard Hughes Medical Institute (1990 – 2001)

JUDY C. LEWENT — Age 54

January, 2003 — Executive Vice President, Chief Financial Officer and President, Human Health Asia — responsible for financial and corporate development functions, internal auditing, corporate licensing, the Company's prescription drug business in Asia North and Asia South, the Company's joint venture relationships, and Merck Capital Ventures, LLC, a subsidiary of the Company

February, 2001 — Executive Vice President and Chief Financial Officer — responsible for financial and corporate development functions, internal auditing, corporate licensing, the Company's joint venture relationships, and Merck Capital Ventures, LLC

November, 2000 — Senior Vice President and Chief Financial Officer — responsible for financial and corporate development functions, internal auditing,



corporate licensing, the Company's joint venture relationships, and Merck Capital Ventures, LLC

January, 1997 — Senior Vice President (since January, 1993) and Chief Financial Officer (since April, 1990) — responsible for financial and corporate development functions, internal auditing and the Company's joint venture relationships

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ADEL MAHMOUD — Age 61

May, 1999 — President, Merck Vaccines

November, 1998 — Executive Vice President, Merck Vaccines

Prior to November, 1998, Dr. Mahmoud was the John H. Hord Professor and Chairman, Department of Medicine and Physician-in-Chief, Case Western Reserve University and University Hospitals of Cleveland (1987–1998)

MARGARET G. MCGLYNN — Age 43

January, 2003 — President, U.S. Human Health — responsible for one of the two prescription drug divisions (hospital and specialty product franchises) comprising U.S. Human Health (USHH), and the Managed Care Group of USHH

August, 2001 — Executive Vice President, Customer Marketing and Sales, USHH

November, 1998 — Senior Vice President, Worldwide Human Health Marketing

August, 1995 — Senior Vice President, Health and Utilization Management, Medco Health Solutions, Inc., a wholly-owned subsidiary of the Company

BRADLEY T. SHEARES — Age 46

January, 2003 — President, U.S. Human Health — responsible for one of the two prescription drug divisions (primary care product franchises) comprising U.S. Human Health (USHH)

March, 2001 — President, U.S. Human Health — responsible for one of the two prescription drug divisions (hospital and specialty product franchises) comprising USHH

July, 1998 — Vice President, Hospital Marketing and Sales, USHH

May, 1996 — Vice President, Anti-Infectives Therapeutic Business Group, USHH

JOAN E. WAINWRIGHT — Age 42

January, 2001 — Vice President, Public Affairs

June, 2000 — Vice President, Corporate Communications, Public Affairs

Prior to June, 2000, Ms. Wainwright was Deputy Commissioner for Communications at the U.S. Social Security Administration (1994 – 2000)

PER WOLD-OLSEN — Age 55

January, 1997 — President, Human Health–Europe, Middle East & Africa — responsible for the Company's prescription drug business in Europe, the Middle East and Africa and worldwide human health marketing

All officers listed above serve at the pleasure of the Board of Directors. None of these officers was elected pursuant to any arrangement or understanding between the officer and the Board. There are no family relationships among the officers listed above.

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## PART II

### **Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.**

The information required for this item is incorporated by reference to pages 37 and 56 of the Company's 2002 Annual Report to stockholders.

### **Item 6. Selected Financial Data.**

The information required for this item is incorporated by reference to the data for the last five fiscal years of the Company included under Results for Year and Year-End Position in the Selected Financial Data table on page 56 of the Company's 2002 Annual Report to stockholders.

### **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

The information required for this item is incorporated by reference to pages 19 through 37 of the Company's 2002 Annual Report to stockholders.

### **Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**

The information required for this item is incorporated by reference to pages 29 to 31 of the Company's 2002 Annual Report to stockholders.

### **Item 8. Financial Statements and Supplementary Data.**

#### **(a) Financial Statements**

The consolidated balance sheet of Merck & Co., Inc. and subsidiaries as of December 31, 2002 and 2001, and the related consolidated statements of income, retained earnings, comprehensive income and cash flows for each of the three years in the period ended December 31, 2002, the report dated January 28, 2003 of PricewaterhouseCoopers LLP, independent public accountants, and a copy of the report dated January 22, 2002, previously issued by Arthur Andersen LLP, independent public accountants, are incorporated by reference to pages 38 through 53 and page 55, respectively, of the Company's 2002 Annual Report to stockholders.

#### **(b) Supplementary Data**

Selected quarterly financial data for 2002 and 2001 are incorporated by reference to the data contained in the Condensed Interim Financial Data table on page 37 of the Company's 2002 Annual Report to stockholders.

### **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

On February 26, 2002, the Board of Directors of the Company and its Audit Committee dismissed Arthur Andersen LLP ("Arthur Andersen" or "AA") as the Company's independent public accountants and engaged PricewaterhouseCoopers LLP ("PwC") to serve as the Company's independent public accountants for the fiscal year 2002. The appointment of PwC was ratified by stockholders at the Company's 2002 Annual Meeting of Stockholders.

Arthur Andersen's reports on the Company's consolidated financial statements for each of the years ended 2001 and 2000 did not contain an adverse opinion or disclaimer of opinion, nor were they qualified or modified as to uncertainty, audit scope or accounting principles.

During the years ended December 31, 2001 and 2000 and through March 21, 2002, there were no disagreements with Arthur Andersen on any matter of accounting principle or practice, financial statement disclosure, or auditing scope or procedure which, if not resolved to AA's satisfaction, would have caused them to make reference to the subject matter in connection with their report on the Company's consolidated financial statements for such years; and there were no reportable events as defined in Item 304(a)(1)(v) of Regulation S-K.

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The Company provided Arthur Andersen with a copy of the foregoing disclosures. A copy of AA's letter, dated March 21, 2002, stating its agreement with such statements, is incorporated by reference to Exhibit 16 filed with the Annual Report on Form 10-K for the fiscal year ended December 31, 2001.

During the years ended December 31, 2001 and 2000 and through the date of the Board's decision, the Company did not consult PwC with respect to the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's consolidated financial statements, or any other matters or reportable events as set forth in Items 304(a)(2)(i) and (ii) of Regulation S-K.

### **PART III**

#### **Item 10. Directors and Executive Officers of the Registrant.**

The required information on directors and nominees is incorporated by reference to pages 8 through 10 of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003. Information on executive officers is set forth in Part I of this document on pages 18 through 20. The required information on compliance with Section 16(a) of the Securities Exchange Act of 1934 is incorporated by reference to page 37 (under the caption "Section 16(a) Beneficial Ownership Reporting Compliance") of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003.

#### **Item 11. Executive Compensation.**

The information required for this item is incorporated by reference to pages 12 (under the caption "Compensation Committee Interlocks and Insider Participation"), 14 (under the caption "Compensation of Directors") to 15, 16 (beginning with the caption "Compensation and Benefits Committee Report on Executive Compensation") to 22, and 23 (beginning with the caption "Annual Benefits Payable Under Merck & Co., Inc. Retirement Plans) to 27 of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003.

#### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

The information required for this item is incorporated by reference to pages 15 (under the caption "Security Ownership of Certain Beneficial Owners and Management") to 16 of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003. Information with respect to equity compensation plans is incorporated by reference to pages 22 (beginning with the caption "Equity Compensation Plan Information") to 23 of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003.

#### **Item 13. Certain Relationships and Related Transactions.**

The information required for this item is incorporated by reference to page 13 (under the caption "Relationships with Outside Firms") and pages 26 (under the caption "Indebtedness of Management") to 27 of the Company's Proxy Statement for the Annual Meeting of Stockholders to be held April 22, 2003.

#### **Item 14. Controls and Procedures.**

Based on their evaluation, as of a date within 90 days of the filing date of this Form 10-K, the Company's Chief Executive Officer and Chief Financial Officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934, as amended) are effective. There have been no significant changes in internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K.

#### (a) Documents filed as part of this Form 10-K

##### 1. Financial Statements

The following consolidated financial statements and reports of independent public accountants are incorporated herein by reference to the Company's 2002 Annual Report to stockholders, as noted on page 21 of this document:

Consolidated statement of income for the years ended December 31, 2002, 2001 and 2000

Consolidated statement of retained earnings for the years ended December 31, 2002, 2001 and 2000

Consolidated statement of comprehensive income for the years ended December 31, 2002, 2001 and 2000

Consolidated balance sheet as of December 31, 2002 and 2001

Consolidated statement of cash flows for the years ended December 31, 2002, 2001 and 2000

Notes to consolidated financial statements

Report of PricewaterhouseCoopers LLP, independent public accountants

Copy of the report dated January 22, 2002, previously issued by Arthur Andersen LLP, independent public accountants

##### 2. Financial Statement Schedules

Schedules are omitted because they are either not required or not applicable.

Financial statements of affiliates carried on the equity basis have been omitted because, considered individually or in the aggregate, such affiliates do not constitute a significant subsidiary.

##### 3. Exhibits

Exhibit			
Number	Description		Method of Filing
2.1	—	Master Restructuring Agreement dated as of June 19, 1998 between Astra AB, Merck & Co., Inc., Astra Merck Inc., Astra USA, Inc., KB USA, L.P., Astra Merck Enterprises, Inc., KBI Sub Inc., Merck Holdings, Inc. and Astra Pharmaceuticals, L.P. (Portions of this Exhibit are subject to a request for confidential treatment filed with the Commission)	**
3.1	—	Restated Certificate of Incorporation of Merck & Co., Inc. (September 1, 2000)	Incorporated by reference to Form 10-Q Quarterly Report for the

3.2 — By-Laws of Merck & Co., Inc. (as amended effective February 25, 1997)

period ended September 30, 2000  
Incorporated by reference to Form  
10-Q Quarterly Report for the  
period ended March 31, 1997

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\*\* Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1998.



Exhibit		Method of Filing
Number	Description	
*10.1	— Executive Incentive Plan (as amended effective February 27, 1996)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1995
*10.2	— Base Salary Deferral Plan (as adopted on October 22, 1996, effective January 1, 1997)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1996
*10.3	— Merck & Co., Inc. Deferral Program (amended and restated January 10, 2003)	Incorporated by reference to Registration Statement on Form S-8 (No. 333-101519)
*10.4	— 1991 Incentive Stock Plan (as amended effective February 23, 1994)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1994
*10.5	— 1996 Incentive Stock Plan (as amended November 24, 1998)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1999
*10.6	— 2001 Incentive Stock Plan (as amended and restated February 26, 2002)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2001
*10.7	— Non-Employee Directors Stock Option Plan (as amended and restated February 24, 1998)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1997
*10.8	— 1996 Non-Employee Directors Stock Option Plan (as amended April 27, 1999)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1999
*10.9	— 2001 Non-Employee Directors Stock Option Plan (as amended April 19, 2002)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 2002
*10.10	— Supplemental Retirement Plan (as amended effective January 1, 1995)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1994
*10.11	— Retirement Plan for the Directors of Merck & Co., Inc. (amended and restated June 21, 1996)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1996

\* Management contract or compensatory plan or arrangement.

Exhibit		Method of Filing
Number	Description	
*10.12	— Plan for Deferred Payment of Directors' Compensation (amended and restated January 10, 2003)	Filed with this document
10.13	— Limited Liability Company Agreement of Merck Capital Ventures, LLC (Dated as of November 27, 2000)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2000
*10.14	— Agreement dated January 3, 2003, between Edward M. Scolnick and Merck & Co., Inc.	Filed with this document
10.15	— Amended and Restated License and Option Agreement dated as of July 1, 1998 between Astra AB and Astra Merck Inc.	**
10.16	— KBI Shares Option Agreement dated as of July 1, 1998 by and among Astra AB, Merck & Co., Inc. and Merck Holdings, Inc.	**
10.17	— KBI-E Asset Option Agreement dated as of July 1, 1998 by and among Astra AB, Merck & Co., Inc., Astra Merck Inc. and Astra Merck Enterprises Inc.	**
10.18	— KBI Supply Agreement dated as of July 1, 1998 between Astra Merck Inc. and Astra Pharmaceuticals, L.P. (Portions of this Exhibit are subject to a request for confidential treatment filed with the Commission)	**
10.19	— Second Amended and Restated Manufacturing Agreement dated as of July 1, 1998 among Merck & Co., Inc., Astra AB, Astra Merck Inc. and Astra USA, Inc.	**
10.20	— Limited Partnership Agreement dated as of July 1, 1998 between KB USA, L.P. and KBI Sub Inc.	**
10.21	— Distribution Agreement dated as of July 1, 1998 between Astra Merck Enterprises Inc. and Astra Pharmaceuticals, L.P.	**
10.22	— Agreement to Incorporate Defined Terms dated as of June 19, 1998 between Astra AB, Merck & Co., Inc., Astra Merck Inc., Astra USA, Inc., KB USA, L.P., Astra Merck Enterprises Inc., KBI Sub Inc., Merck Holdings, Inc. and Astra Pharmaceuticals, L.P.	**
12	— Computation of Ratios of Earnings to Fixed Charges	Filed with this document
13	— 2002 Annual Report to stockholders (only those portions incorporated by reference in this document are deemed "filed")	Filed with this document
16	— Letter from Arthur Andersen LLP to the Securities and Exchange Commission dated March 21, 2002	Incorporated by reference to Form 8-K/A Amendment No. 1 to Current Report on Form 8-K dated March 21, 2002
21	— List of subsidiaries	Filed with this document
23.1	— Consent of Independent Public Accountants	Contained on page 30 of this Report

\* Management contract or compensatory plan or arrangement.

\*\* Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1998.

Exhibit		
Number	Description	Method of Filing
23.2	— Notice Regarding Consent of Arthur Andersen LLP	Filed with this document
24.1	— Power of Attorney	Filed with this document
24.2	— Certified Resolution of Board of Directors	Filed with this document
99	— Letter from Registrant to the Securities and Exchange Commission relating to Arthur Andersen LLP	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2001
99.1	— Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed with this document
99.2	— Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed with this document

None of the instruments defining the rights of holders of long-term debt of the Company and its subsidiaries (Exhibit Number 4) are being filed since the total amount of securities authorized under any of such instruments taken individually does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis. The Company agrees to furnish a copy of such instruments to the Commission upon request.

Copies of the exhibits may be obtained by stockholders upon written request directed to the Stockholder Services Department, Merck & Co., Inc., P.O. Box 100—WS 3AB—40, Whitehouse Station, New Jersey 08889—0100 accompanied by check in the amount of \$5.00 payable to Merck & Co., Inc. to cover processing and mailing costs.

**(b) Reports on Form 8-K**

During the three-month period ended December 31, 2002, the Company furnished five Current Reports on Form 8-K under Item 9—Regulation FD Disclosure:

- (1) Report dated and furnished October 18, 2002, regarding earnings for third quarter and certain supplemental information.
- (2) Report dated and furnished December 5, 2002, regarding financial guidance for 2003.
- (3) Report dated and furnished December 9, 2002, regarding a press release issued by Medco Health Solutions, Inc., a wholly-owned subsidiary of the Registrant.
- (4) Report dated and furnished December 10, 2002, regarding analyst business briefing presentations.
- (5) Report dated and furnished December 10, 2002, regarding the Company's business briefing to analysts.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: March 21, 2003

MERCK & CO., INC.

By: \_\_\_\_\_ \*

RAYMOND V. GILMARTIN  
(Chairman of the Board,  
President and Chief Executive Officer)

By: \_\_\_\_\_ /s/ CELIA A. COLBERT

CELIA A. COLBERT  
Celia A. Colbert  
(Attorney-in-Fact)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
* _____ RAYMOND V. GILMARTIN	Chairman of the Board, President and Chief Executive Officer; Principal Executive Officer; Director	March 21, 2003
* _____ JUDY C. LEWENT	Executive Vice President, Chief Financial Officer and President, Human Health Asia; Principal Financial Officer	March 21, 2003
* _____ RICHARD C. HENRIQUES JR.	Vice President, Controller; Principal Accounting Officer	March 21, 2003
* _____ LAWRENCE A. BOSSIDY	Director	March 21, 2003
* _____ WILLIAM G. BOWEN	Director	March 21, 2003
* _____ JOHNNETTA B. COLE	Director	March 21, 2003
* _____ WILLIAM M. DALEY	Director	March 21, 2003
* _____ WILLIAM B. HARRISON JR.	Director	March 21, 2003

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WILLIAM N. KELLEY	Director	March 21, 2003
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_____		
HEIDI G. MILLER	Director	March 21, 2003
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_____		
THOMAS E. SHENK	Director	March 21, 2003
_____		
ANNE M. TATLOCK	Director	March 21, 2003
*		
_____		
SAMUEL O. THIER	Director	March 21, 2003

**\*Celia A. Colbert, by signing her name hereto, does hereby sign this document pursuant to powers of attorney duly executed by the persons named, filed with the Securities and Exchange Commission as an exhibit to this document, on behalf of such persons, all in the capacities and on the date stated, such persons including a majority of the directors of the Company.**

By:

/s/ CELIA A. COLBERT

CELIA A. COLBERT  
Celia A. Colbert

(Attorney-in-Fact)

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## CERTIFICATION

I, Raymond V. Gilmartin, certify that:

1. I have reviewed this annual report on Form 10-K of Merck & Co., Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 21, 2003

By: /s/ RAYMOND V. GILMARTIN

Raymond V. Gilmartin

Chairman, President and Chief Executive Officer



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## CERTIFICATION

I, Judy C. Lewent, certify that:

1. I have reviewed this annual report on Form 10-K of Merck & Co., Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:
  - a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and
  - c) Presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 21, 2003

By: /s/ JUDY C. LEWENT

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Judy C. Lewent

Executive Vice President & Chief Financial Officer





**CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 33-21087, 33-21088, 33-36101, 33-40177, 33-51235, 33-53463, 33-64273, 33-64665, 333-23293, 333-23295, 333-91769, 333-30526, 333-31762, 333-40282, 333-52264, 333-53246, 333-56696, 333-72206, 333-65796 and 333-101519) and on Form S-3 (Nos. 33-39349, 33-60322, 33-51785, 33-57421, 333-17045, 333-36383, 333-77569, 333-72546 and 333-87034) of Merck & Co., Inc. of our report dated January 28, 2003 relating to the financial statements, which appears in the Company's Annual Report to stockholders, which is incorporated in this Annual Report on Form 10-K.

PricewaterhouseCoopers LLP

Florham Park, New Jersey

March 21, 2003

**EXHIBIT INDEX**

<u>Exhibit Number</u>	<u>Description</u>	<u>Method of Filing</u>
2.1	— Master Restructuring Agreement dated as of June 19, 1998 between Astra AB, Merck & Co., Inc., Astra Merck Inc., Astra USA, Inc., KB USA, L.P., Astra Merck Enterprises, Inc., KBI Sub Inc., Merck Holdings, Inc. and Astra Pharmaceuticals, L.P. (Portions of this Exhibit are subject to a request for confidential treatment filed with the Commission)	**
3.1	— Restated Certificate of Incorporation of Merck & Co., Inc. (September 1, 2000)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended September 30, 2000
3.2	— By-Laws of Merck & Co., Inc. (as amended effective February 25, 1997)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended March 31, 1997
*10.1	— Executive Incentive Plan (as amended effective February 27, 1996)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1995
*10.2	— Base Salary Deferral Plan (as adopted on October 22, 1996, effective January 1, 1997)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1996
*10.3	— Merck & Co., Inc. Deferral Program (amended and restated January 10, 2003)	Incorporated by reference to Registration Statement on Form S-8 (No. 333-101519)
*10.4	— 1991 Incentive Stock Plan (as amended effective February 23, 1994)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1994
*10.5	— 1996 Incentive Stock Plan (as amended November 24, 1998)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1999
*10.6	— 2001 Incentive Stock Plan (as amended and restated February 26, 2002)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2001
*10.7	— Non-Employee Directors Stock Option Plan (as amended and restated February 24, 1998)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1997
*10.8	— 1996 Non-Employee Directors Stock Option Plan (as amended April 27, 1999)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1999

\* Management contract or compensatory plan or arrangement.

\*\* Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1998.

Exhibit Number	Description	Method of Filing
*10.9	— 2001 Non-Employee Directors Stock Option Plan (as amended April 19, 2002)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 2002
*10.10	— Supplemental Retirement Plan (as amended effective January 1, 1995)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 1994
*10.11	— Retirement Plan for the Directors of Merck & Co., Inc. (amended and restated June 21, 1996)	Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1996
*10.12	— Plan for Deferred Payment of Directors' Compensation (amended and restated January 10, 2003)	Filed with this document
10.13	— Limited Liability Company Agreement of Merck Capital Ventures, LLC (Dated as of November 27, 2000)	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2000
*10.14	— Agreement dated January 3, 2003, between Edward M. Scolnick and Merck & Co., Inc.	Filed with this document
10.15	— Amended and Restated License and Option Agreement dated as of July 1, 1998 between Astra AB and Astra Merck Inc.	**
10.16	— KBI Shares Option Agreement dated as of July 1, 1998 by and among Astra AB, Merck & Co., Inc. and Merck Holdings, Inc.	**
10.17	— KBI-E Asset Option Agreement dated as of July 1, 1998 by and among Astra AB, Merck & Co., Inc., Astra Merck Inc. and Astra Merck Enterprises Inc.	**
10.18	— KBI Supply Agreement dated as of July 1, 1998 between Astra Merck Inc. and Astra Pharmaceuticals, L.P. (Portions of this Exhibit are subject to a request for confidential treatment filed with the Commission)	**
10.19	— Second Amended and Restated Manufacturing Agreement dated as of July 1, 1998 among Merck & Co., Inc., Astra AB, Astra Merck Inc. and Astra USA, Inc.	**
10.20	— Limited Partnership Agreement dated as of July 1, 1998 between KB USA, L.P. and KBI Sub Inc.	**
10.21	— Distribution Agreement dated as of July 1, 1998 between Astra Merck Enterprises Inc. and Astra Pharmaceuticals, L.P.	**

\* Management contract or compensatory plan or arrangement.

\*\* Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1998.

Exhibit Number	Description	Method of Filing
10.22	— Agreement to Incorporate Defined Terms dated as of June 19, 1998 between Astra AB, Merck & Co., Inc., Astra Merck Inc., Astra USA, Inc., KB USA, L.P., Astra Merck Enterprises Inc., KBI Sub Inc., Merck Holdings, Inc. and Astra Pharmaceuticals, L.P.	**
12	— Computation of Ratios of Earnings to Fixed Charges	Filed with this document
13	— 2002 Annual Report to stockholders (only those portions incorporated by reference in this document are deemed “filed”)	Filed with this document
16	— Letter from Arthur Andersen LLP to the Securities and Exchange Commission dated March 21, 2002	Incorporated by reference to Form 8-K/A Amendment No. 1 to Current Report on Form 8-K dated March 21, 2002
21	— List of subsidiaries	Filed with this document
23.1	— Consent of Independent Public Accountants	Contained on page 30 of this Report
23.2	— Notice Regarding Consent of Arthur Andersen LLP	Filed with this document
24.1	— Power of Attorney	Filed with this document
24.2	— Certified Resolution of Board of Directors	Filed with this document
99	— Letter from Registrant to the Securities and Exchange Commission relating to Arthur Andersen LLP	Incorporated by reference to Form 10-K Annual Report for the fiscal year ended December 31, 2001
99.1	— Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed with this document
99.2	— Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Filed with this document

\*\* Incorporated by reference to Form 10-Q Quarterly Report for the period ended June 30, 1998

None of the instruments defining the rights of holders of long-term debt of the Company and its subsidiaries (Exhibit Number 4) are being filed since the total amount of securities authorized under any of such instruments taken individually does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis. The Company agrees to furnish a copy of such instruments to the Commission upon request.

**MERCK & CO., INC.**

**PLAN FOR DEFERRED PAYMENT OF**

**DIRECTORS' COMPENSATION**

*(Amended and Restated January 10, 2003)*

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**MERCK & CO., INC.**

**PLAN FOR DEFERRED PAYMENT OF  
DIRECTORS' COMPENSATION**

**I. PURPOSE**

To provide an arrangement under which directors of Merck & Co., Inc. other than current employees may (i) elect to voluntarily defer payment of the annual retainer and meeting and committee fees until after termination of their service as a director, and (ii) value compensation mandatorily deferred on their behalf.

**II. ELECTION OF DEFERRAL, MEASUREMENT METHODS AND DISTRIBUTION SCHEDULE**

A. Election of Voluntary Deferral Amount

1. Prior to December 28 of each year, each director is entitled to make an irrevocable election to defer until termination of service as a director receipt of payment of (a) 50% or 100% of the retainer for the 12 months beginning April 1 of the next calendar year, (b) 50% or 100% of the Committee Chairperson retainer beginning April 1 of the next calendar year, and (c) 50% or 100% of the meeting and committee fees for the 12 months beginning April 1 of the next calendar year.
2. Prior to commencement of duties as a director, a director newly elected or appointed to the Board during a calendar year must make the election under this paragraph for the portion of the Voluntary Deferral Amount applicable to such director's first year of service (or part thereof).
3. The Voluntary Deferral Amount shall be credited as follows: (1) Meeting and committee fees that are deferred are credited as of the day the director's services are rendered; (2) if the Board retainer and/or Committee Chairperson retainer is deferred, a pro-rata share of the deferred retainer is credited on the last business day of each calendar quarter. The dates the Voluntary Deferral Amount, or parts thereof, are credited to the director's deferred account are hereinafter referred to as the Voluntary Deferral Dates.

B. Mandatory Deferral Amount

1. On the Friday following the Company's Annual Meeting of Stockholders (such Friday hereinafter referred to as the "Mandatory Deferral Date"), each director will be credited with an amount equivalent to one-third of the annual cash retainer for the 12 month period beginning on the April 1 preceding the Annual Meeting (the "Mandatory Deferral Amount"). The Mandatory Deferral Amount will be measured by the Merck Common Stock account.
2. A director newly elected or appointed to the Board after the Mandatory Deferral Date will be credited with a pro rata portion of the Mandatory Deferral Amount applicable to such director's first year of service (or part thereof). Such pro rata portion shall be credited to the director's account on the first day of such director's service.



C. Election of Measurement Method

Each such annual election referred to in Section A shall include an election as to the measurement method or methods by which the value of amounts deferred will be measured in accordance with Article III, below. The available measurement methods are set forth on Schedule A hereto.

D. Election of Distribution Schedule

Each annual election referred to in Section A above shall also include an election to receive payment following termination of service as a director of all Voluntary Deferral Amounts and Mandatory Deferral Amounts in a lump sum either immediately or one year after such termination, or in quarterly or annual installments over five, ten or fifteen years.

### III. VALUATION OF DEFERRED AMOUNTS

A. Common Stock

1. *Initial Crediting.* The annual Mandatory Deferral Amount shall be used to determine the number of full and partial shares of Merck Common Stock which such amount would purchase at the closing price of the Common Stock on the New York Stock Exchange on the Mandatory Deferral Date.

That portion of the Voluntary Deferral Amount allocated to Merck Common Stock shall be used to determine the number of full and partial shares of Merck Common Stock which such amount would purchase at the closing price of the Common Stock on the New York Stock Exchange on the applicable Voluntary Deferral Date.

However, should it be determined by the Committee on Directors of the Board of Directors that a measurement of Merck Common Stock on any Mandatory or Voluntary Deferral Date would not constitute fair market value, then the Committee shall decide on which date fair market value shall be determined using the valuation method set forth in this Article III, Section A.1.

At no time during the deferral period will any shares of Merck Common Stock be purchased or earmarked for such deferred amounts nor will any rights of a shareholder exist with respect to such amounts.

2. *Dividends.* Each director's account will be credited with the additional number of full and partial shares of Merck Common Stock which would have been purchasable with the dividends on shares previously credited to the account at the closing price of the Common Stock on the New York Stock Exchange on the date each dividend was paid.
3. *Distributions.* Distribution from the Merck Common Stock account will be valued at the closing price of Merck Common Stock on the New York Stock Exchange on the distribution date.

B. Mutual Funds

1. *Initial Crediting.* The amount allocated to each Mutual Fund shall be used to determine the full and partial Mutual Fund shares which such amount would purchase at the closing net asset value of the Mutual Fund shares on the Mandatory or Voluntary Deferral Date, whichever is applicable. The director's account will be credited with the number of full and partial Mutual Fund shares so determined.

At no time during the deferral period will any Mutual Fund shares be purchased or earmarked for such deferred amounts nor will any rights of a shareholder exist with respect to such amounts.

2. *Dividends.* Each director's account will be credited with the additional number of full and partial Mutual Fund shares which would have been purchasable, at the closing net asset value of the Mutual Fund shares as of the date each dividend is paid on the Mutual Fund shares, with the dividends which would have been paid on the number of shares previously credited to such account (including pro rata dividends on any partial shares).
3. *Distributions.* Mutual Fund distributions will be valued based on the closing net asset value of the Mutual Fund shares on the distribution date.

C. Adjustments

In the event of a reorganization, recapitalization, stock split, stock dividend, combination of shares, merger, consolidation, rights offering or any other change in the corporate structure or shares of the Company or a Mutual Fund, the number and kind of shares or units of such investment measurement method available under this Plan and credited to each director's account shall be adjusted accordingly.

#### IV. REDESIGNATION WITHIN A DEFERRAL ACCOUNT

A. General

A director may request a change in the measurement methods used to value all or a portion his/her account other than Merck Common Stock. **Amounts deferred using the Merck Common Stock method and any earnings attributable to such deferrals may not be redesignated.** The change will be effective on (i) the day when the redesignation request is received pursuant to administrative guidelines established by the Human Resources Financial Services area of the Treasury department, provided the request is received prior to the close of the New York Stock Exchange on such day or (ii) the next following business day if the request is received when the New York Stock Exchange is closed.

B. When Redesignation May Occur

1. *During Active Service.* There is no limit on the number of times a director may redesignate the portion of his/her deferred account permitted to be redesignated. Each such request shall be irrevocable and can be designated in whole percentages or as a dollar amount.

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2. *After Death.* Following the death of a director, the legal representative or beneficiary of such director may redesignate subject to the same rules as for active directors set forth in Article IV, Section B.1.

C. Valuation of Amounts to be Redesignated

The portion of the director's account to be redesignated will be valued at its cash equivalent and such cash equivalent will be converted into shares or units of the other measurement method(s). For purposes of such redesignations, the cash equivalent of the value of the Mutual Fund shares shall be the closing net asset value of such Mutual Fund on (i) the day when the redesignation request is received pursuant to administrative guidelines established by the Human Resources Financial Services area of the Treasury department, provided the request is received prior to the close of the New York Stock Exchange on such day or (ii) the next following business day if the request is received when the New York Stock Exchange is closed.

V. **PAYMENT OF DEFERRED AMOUNTS**

A. Payment

All payments to directors of amounts deferred will be in cash in accordance with the distribution schedule elected by the director pursuant to Article II, Section D. Distributions shall be pro rata by measurement method. Distributions shall be valued on the fifteenth day of the distribution month (or, if such day is not a business day, the next business day) and paid as soon thereafter as possible.

B. Changes to Distribution Schedule Prior to Termination

Upon the request of a director made at any time during the calendar year immediately preceding the calendar year in which service as a director is expected to terminate, the Committee on Directors of the Board of Directors ("Committee on Directors"), in its sole discretion, may authorize: (a) an extension of a payment period beyond that originally elected by the director not to exceed that otherwise allowable under Article II, Section D, and/or (b) a payment frequency different from that originally elected by the director. Such request may not be made with regard to amounts deferred after December 31, 1990 using the Merck Common Stock method and to any earnings attributable to such deferrals. Deferrals into Merck Common Stock made after December 31, 1990 and any earnings thereon may only be distributed in accordance with the schedule elected by the director under Article II, Section D or determined by the Committee on Directors under Article VI.

C. Post-Termination Changes to Distribution Schedule

Following termination of service as a director, each director may make one request for a further extension of the period for distribution of his/her deferred compensation. Such request must be received by the Committee on Directors prior to the first distribution to the participant under his/her previously elected distribution schedule. Any revised distribution schedule may not exceed the deferral period otherwise allowable under Article II, Section C. This request may be granted and a new payment schedule determined in the sole discretion of the Committee on Directors.

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Such request may not be made with regard to amounts deferred after December 31, 1990 using the Merck Common Stock Method and to any earnings attributable to such deferrals. Any retired director who is not subject to U.S. income tax may petition the Committee on Directors to change payment frequency, including a lump sum distribution, and the Committee on Directors may grant such petition if, in its discretion, it considers there to be reasonable justification therefor. Deferrals into Merck Common Stock made after December 30, 1990 and any earnings thereon may only be distributed in accordance with the schedule elected by the director under Article II, Section D or determined by the Committee on Directors under Article VI.

D. Forfeitures

A director's deferred amount attributable to the Mandatory Deferral Amount and earnings thereon shall be forfeited upon his or her removal as a director or upon a determination by the Committee on Directors in its sole discretion, that a director has:

- (i) joined the Board of, managed, operated, participated in a material way in, entered employment with, performed consulting (or any other) services for, or otherwise been connected in any material manner with a company, corporation, enterprise, firm, limited partnership, partnership, person, sole proprietorship or any other business entity determined by the Committee on Directors in its sole discretion to be competitive with the business of the Company, its subsidiaries or its affiliates (a "Competitor");
- (ii) directly or indirectly acquired an equity interest of five (5) percent or greater in a Competitor; or
- (iii) disclosed any material trade secrets or other material confidential information, including customer lists, relating to the Company or to the business of the Company to others, including a Competitor.

**VI. DESIGNATION OF BENEFICIARY**

In the event of the death of a director, the deferred amount at the date of death shall be paid to the last named beneficiary or beneficiaries designated by the director, or, if no beneficiary has been designated, to the director's legal representative, in one or more installments as the Committee on Directors in its sole discretion may determine.

**VII. PLAN AMENDMENT OR TERMINATION**

The Committee on Directors shall have the right to amend or terminate this Plan at any time for any reason.

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## SCHEDULE A

### MEASUREMENT METHODS

(January 1, 2002 – January 10, 2003)

#### Merck Common Stock

#### Mutual Funds

American Century Emerging Markets Fund

American Century Europacific Growth Fund

Fidelity Destiny I

Fidelity Dividend Growth

Fidelity Equity Income Fund

Fidelity Low-Priced Stock Fund

Fidelity Retirement Money Market

Fidelity Spartan Government Income

Fidelity Spartan U.S. Equity Index

Franklin Small-Mid Cap Growth A

Janus Enterprise

Janus Growth & Income

Liberty Acorn Z

PIMCO Foreign Bond Institutional

PIMCO Long Term US Government Institutional

PIMCO Total Return Institutional

Putnam Global Equity Fund A\*

Putnam International Voyager A

Putnam Vista A

T. Rowe Price Blue Chip Growth Fund

Vanguard Asset Allocation

\*From September 20, 2002 — September 30, 2002, this investment was briefly named the Putnam Global Growth Fund A as a result of the merger, in September 2002, of Putnam Global Equity Fund A with Putnam Global Growth Fund A. The merged fund briefly retained the name “Putnam Global Growth Fund A.” Effective October 1, 2002, the merged fund changed its name to “Putnam Global Equity Fund A.”

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**SCHEDULE A**

**MEASUREMENT METHODS**

**(Effective January 11, 2003)**

**Merck Common Stock**

**Mutual Funds**

American Century Emerging Markets Institutional

American Funds EuroPacific Growth Fund

Fidelity Destiny I

Fidelity Dividend Growth

Fidelity Equity–Income

Fidelity Low–Priced Stock

Fidelity Retirement Money Market

Fidelity Spartan Government Income

Fidelity Spartan U.S. Equity Index

Franklin Small–Mid Cap Growth A

Janus Enterprise

Janus Growth & Income

Liberty Acorn Class Z

PIMCO Foreign Bond Institutional

PIMCO Long Term US Government Institutional

PIMCO Total Return Institutional

Putnam Global Equity A

Putnam International Voyager A

Putnam Vista A

T. Rowe Price Blue Chip Growth

Vanguard Asset Allocation

**AGREEMENT**

**WHEREAS** Dr. Edward M. Scolnick (“Dr. Scolnick”) has expressed an interest in relinquishing his executive duties and devoting himself full time to research activities, while remaining employed by Merck & Co., Inc. (“Merck” or “the Company”), and

**WHEREAS** Merck wishes to continue to support and benefit from Dr. Scolnick’s outstanding research ability, insights and knowledge;

**IT IS HEREBY AGREED** as follows:

1. Change in Title and Job Responsibilities. Effective upon the close of business on December 31, 2002, Dr. Scolnick will voluntarily relinquish his positions, titles and responsibilities (a) as Merck’s Executive Vice President, Science and Technology, (b) as President, Merck Research Laboratories (“MRL”), (c) as a member of Merck’s Management Committee, (d) as a member of MRL’s Research Management Committee, (e) as a member of the board of directors of Merck and of any subsidiary or unit of Merck, and (f) as a member of any other Merck committee on which he is currently serving; and in consideration therefor Merck will appoint Dr. Scolnick as President Emeritus, MRL, effective January 1, 2003. In that capacity, Dr. Scolnick will report to Merck’s Chief Executive Officer and will be responsible for engaging in scientific research in a field of his choice, subject to the approval of the President, MRL.

2. West Point Laboratory. To enable Dr. Scolnick to engage in scientific research as President Emeritus, MRL, Merck will (a) assign to him a laboratory appropriate for such research at Merck’s facility in West Point, Pennsylvania, (b) allot to him an annual budget to be determined by the President, MRL, which shall not be less than \$1.25 million, for supplies, equipment, other materials, and scientific staff needed for the laboratory, and (c) assign to him a full time administrative assistant. Dr. Scolnick will be responsible for administering the budget and supervising the staff. Beginning no later than December 2003 and continuing for as long as a laboratory is made available to him under this paragraph, Dr. Scolnick will submit to Merck’s Board of Directors an annual progress report describing the activities and results of the laboratory assigned to him by Merck.

3. Compensation. Commencing on January 1, 2003, Dr. Scolnick’s base salary will be \$50,000 per month subject to appropriate payroll and tax withholding and deductions, and he will continue to be eligible to participate in the various employee benefit plans that cover Merck’s salaried exempt employees; however, he will not be eligible for an AIP or EIP bonus or for annual stock option grants, except that, subject to the approval of the Compensation and Benefits Committee of Merck’s Board of Directors, Dr. Scolnick will be eligible to receive an EIP bonus payable in 2003 for his performance in 2002. In addition, while Dr. Scolnick remains an employee of Merck, Merck will allow him the reasonable use of Merck corporate aircraft (if otherwise available) to attend conferences and external board meetings.

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4. Terms and Conditions of Employment. As a Merck employee, Dr. Scolnick is an employee at will. He will continue to abide and be bound by the "Conditions of Employment" agreement that he signed in 1982, a copy of which is annexed hereto and incorporated herein as Attachment "A," including but not limited to Dr. Scolnick's promises (a) that he will not without authorization disclose confidential information, knowledge, data or property relating or belonging to Merck, (b) that he will not engage in any activity that conflicts with or impairs his obligations as a Merck employee, (c) that all inventions, discoveries and technical or business innovations developed or conceived by him solely or jointly with others during the period of his employment (i) that are along the lines of the activities, operations, work or investigations to which his employment relates or as to which he may receive information due to his employment, or (ii) that result from or are suggested by any work that he may do for Merck, shall be the property of Merck, and (d) that he will endeavor to assist the Company in obtaining, protecting, and enforcing property and ownership rights and patents in such inventions, discoveries and innovations.

5. Retirement.

(a) Notwithstanding anything to the contrary in the Retirement Plan for the Salaried Employees of Merck & Co., Inc. (the "Qualified Plan") and the Merck & Co., Inc. Supplemental Retirement Plan (the "SRP;" together with the Qualified Plan, the "Retirement Plans"), Dr. Scolnick's "Final Average Compensation" as such term is used in the Retirement Plans shall not be less than it would have been if his employment had terminated on December 31, 2002; provided, however, that to the extent use of this Final Average Compensation causes an increase in benefits to be payable in the aggregate from the Retirement Plans, all of such increase shall be payable only from the SRP.

(b) Upon his termination of employment, Dr. Scolnick will be entitled to be treated as a "retiree" under all of Merck's welfare, pension, savings and stock option plans and deferral program according to the terms of such plans in effect from time to time (except as otherwise specifically provided by this Agreement), provided that he has submitted all appropriate paperwork as required by the Company as part of the retirement process.

6. Termination of Employment. In the event that Merck terminates Dr. Scolnick's employment for a reason other than cause, and provided that Dr. Scolnick executes both a release/waiver of claims and a noncompete/nonsolicitation agreement in a form satisfactory to Merck, and further provided that Dr. Scolnick has not violated the "Conditions of Employment" agreement annexed hereto as Attachment "A," if such termination of employment occurs before Dr. Scolnick's 70th birthday, then Merck shall give a one-time grant of \$2,000,000 to an academic institution designated by Dr. Scolnick, for the sole purpose of enabling him to set up and maintain a research laboratory as an employee of that institution. The academic institution must be so designated by Dr. Scolnick within one year of such termination of his employment. In the event such termination is before Dr. Scolnick's 64th birthday, Merck shall also take whatever steps may be necessary to ensure that Dr. Scolnick's "Years of Credited Service," within the meaning of the Retirement Plans, shall be not less than 35. To the extent use of this Credited Service causes an increase in benefits to be payable in the aggregate from the Retirement Plans, all of such increase shall be payable only from the SRP. For purposes of this paragraph only, a termination of Dr. Scolnick's



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employment “for a reason other than cause” shall also be deemed to occur upon Dr. Scolnick’s resignation or retirement within 60 days after Merck either (i) advises Dr. Scolnick that it will no longer support research by Dr. Scolnick in the laboratory assigned under this Agreement or (ii) reduces the annual funding for such laboratory below \$1.25 million.

7. Effective Date. This Agreement will become effective upon execution by both parties, subject to approval by Merck’s Board of Directors.

8. Applicable Law. The parties acknowledge that Dr. Scolnick’s employment relationship with Merck was formed under the laws of the State of New Jersey and the United States and that any question as to the scope, interpretation and effect of this Agreement will be resolved under the substantive and procedural laws of the State of New Jersey.

9. Complete Agreement. This Agreement constitutes the complete and final agreement between the parties and supersedes and replaces all prior or contemporaneous agreements, negotiations or discussions relating to the subject matter of this Agreement. No other agreement shall be binding upon Merck or upon Dr. Scolnick, including, without limitation, any agreement made hereafter, unless in a single, integrated writing titled “Agreement” and signed by Merck and by Dr. Scolnick.

MERCK & CO., INC.

/s/ EDWARD M. SCOLNICK, MD

/s/ RAYMOND V. GILMARTIN

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EDWARD M. SCOLNICK, MD

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by: Raymond V. Gilmartin

Dated: December 20, 2002

Dated: January 3, 2003

## MERCK &amp; CO., INC. AND SUBSIDIARIES

Computation Of Ratios Of Earnings To Fixed Charges

(In millions except ratio data)

	Years Ended December 31					
	2002	2001	2000	1999	1998	1997
Income Before Taxes	\$10,213.6	\$10,402.6	\$ 9,824.1	\$8,619.5	\$8,133.1	\$6,462.3
Add (Subtract):						
One-third of rents	84.3	77.7	67.0	66.7	56.4	46.6
Interest expense, gross	390.8	464.7	484.4	316.9	205.6	129.5
Interest capitalized, net of amortization	(36.9)	(66.1)	(99.0)	(61.4)	(36.9)	(16.5)
Equity (income) loss from affiliates, net of distributions	(156.1)	(113.8)	(288.3)	(352.7)	36.6	153.0
Preferred stock dividends, net of tax	164.3	199.6	205.2	120.7	62.1	49.6
<b>Earnings</b>	<b>\$10,660.0</b>	<b>\$10,964.7</b>	<b>\$10,193.4</b>	<b>\$8,709.7</b>	<b>\$8,456.9</b>	<b>\$6,824.5</b>
One-third of rents	\$ 84.3	\$ 77.7	\$ 67.0	\$ 66.7	\$ 56.4	\$ 46.6
Interest expense, gross	390.8	464.7	484.4	316.9	205.6	129.5
Preferred stock dividends	234.7	285.1	293.1	172.4	88.7	70.9
<b>Fixed Charges</b>	<b>\$ 709.8</b>	<b>\$ 827.5</b>	<b>\$ 844.5</b>	<b>\$ 556.0</b>	<b>\$ 350.7</b>	<b>\$ 247.0</b>
<b>Ratio of Earnings to Fixed Charges</b>	<b>15</b>	<b>13</b>	<b>12</b>	<b>16</b>	<b>24</b>	<b>28</b>

For purposes of computing these ratios, "earnings" consist of income before taxes, one-third of rents (deemed by the Company to be representative of the interest factor inherent in rents), interest expense, net of amounts capitalized, equity income (loss) from affiliates, net of distributions, and dividends on preferred stock of subsidiary companies. "Fixed charges" consist of one-third of rents, interest expense as reported in the Company's consolidated financial statements and dividends on preferred stock of subsidiary companies.

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### Financial Review

#### Description of Merck's Business

Merck is a global research-driven pharmaceutical products and services company that discovers, develops, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures, and provides pharmacy benefit management services through Medco Health Solutions, Inc. (Medco Health).

#### Sales

(\$ in millions)	2002	2001	2000
Atherosclerosis	\$ 5,688.6	\$ 5,525.6	\$ 4,624.1
Hypertension/heart failure	3,496.8	3,602.1	4,041.5
Anti-inflammatory/analgesics	2,613.3	2,421.5	2,115.5
Osteoporosis	2,248.6	1,632.8	1,197.4
Respiratory	1,505.6	1,268.8	800.5
Vaccines/biologicals	1,028.3	1,022.4	952.0
Anti-bacterial/anti-fungal	822.4	751.3	744.0
Ophthalmologicals	622.5	646.5	632.2
Urology	547.9	548.5	449.5
Human immunodeficiency virus (HIV)	293.3	381.8	500.9
Other	2,764.0	3,545.7	4,165.3
Medco Health	30,159.0	26,368.7	20,140.3
	\$51,790.3	\$47,715.7	\$40,363.2

Beginning in 2002, sales by individual therapeutic class are presented net of rebates and discounts. These amounts were previously presented on a gross basis, whereby rebates and discounts were included in Other. Because rebates and discounts have always been included in total net sales, this change in

presentation has no effect on consolidated sales or net income. Sales by individual therapeutic class for 2001 and 2000 are presented on a comparable basis to 2002.

Human health products include therapeutic and preventive agents, generally sold by prescription, for the treatment of human disorders. Among these are atherosclerosis products, of which *Zocor* is the largest-selling; hypertension/heart failure products, the most significant of which are *Cozaar*, *Hyzaar*, *Vasotec* and *Prinivil*; anti-inflammatory/analgesics, which includes *Vioxx* and *Arcoxia*, agents that specifically inhibit the COX-2 enzyme which is responsible for pain and inflammation; an osteoporosis product, *Fosamax*, for treatment and prevention of osteoporosis; a respiratory product, *Singulair*, a leukotriene receptor antagonist; vaccines/biologicals, of which *Varivax*, a

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live virus vaccine for the prevention of chickenpox, *M-M-R II*, a pediatric vaccine for measles, mumps and rubella, and *Recombivax HB* (hepatitis B vaccine recombinant) are the largest-selling; anti-bacterial/anti-fungal products, which includes *Primaxin* and *Cancidas* as well as the recently launched *Invanz*; ophthalmologicals, of which *Cosopt* and *Trusopt* are the largest-selling; a urology product, *Proscar*, for treatment of symptomatic benign prostate enlargement; and HIV products, which includes *Crixivan*, a protease inhibitor for the treatment of human immunodeficiency viral infection in adults.

Other primarily includes sales of other human pharmaceuticals, also net of rebates and discounts, and pharmaceutical and animal health supply sales to the Company's joint ventures and AstraZeneca LP (AZLP), of which *Prilosec* and *Nexium* are the most significant.

Medco Health primarily includes Medco Health sales of non-Merck products and Medco Health pharmacy benefit services, principally sales of prescription drugs through managed prescription drug programs, as well as services provided through programs to help its clients control the cost and enhance the quality of the prescription drug benefits to their members.

Merck sells its human health products primarily to drug wholesalers and retailers, hospitals, clinics, government agencies and managed health care providers such as health maintenance organizations and other institutions. The Company's professional representatives communicate the effectiveness, safety and value of our products to health care professionals in private practice, group practices and managed care organizations.

## **Competition and the Health Care Environment**

The markets in which the Company conducts its business are highly competitive and often highly regulated. Global efforts toward health care cost containment continue to exert pressure on product pricing and access. In the United States, the Company has been working with private and government employers to slow the increase of health care costs. Demonstrating that the Company's medicines can help save costs in other areas and pricing flexibly across our product portfolio have encouraged growing use of our medicines and helped offset the effects of increasing cost pressures. Legislative bodies continue to work to expand health care access and reduce associated costs. Such initiatives include prescription drug benefit proposals for Medicare beneficiaries introduced in the U.S. Congress.

Outside the United States, in difficult environments encumbered by government cost containment actions, the Company has worked with payers to help them allocate scarce resources to optimize health care outcomes, limiting the potentially detrimental effects of government actions on sales growth. In addition, countries within the European Union (EU), recognizing the economic importance of the research-based pharmaceutical industry and the value of innovative medicines to society, are working with industry representatives and the European Commission on proposals to complete the "Single Market" in pharmaceuticals and improve the competitive climate through a variety of means including market deregulation.

There has been an increasing amount of focus on privacy issues in countries around the world, including the United States and the EU. In the United States, federal and state governments have pursued legislative and regulatory initiatives regarding patient privacy, including recently issued federal privacy regulations concerning health information, which have affected the Company's operations, particularly at Medco Health.

Although no one can predict the outcome of these and other legislative, regulatory and advocacy initiatives, we are well positioned to respond to the evolving health care environment and market forces.

We anticipate that the worldwide trend toward cost-containment will continue, resulting in ongoing pressures on health care budgets. As we continue to successfully launch new products, contribute to health care debates and monitor reforms, our new products, policies and strategies will enable us to maintain our strong position in the changing economic environment.

## **Business Strategies**

The Company is discovering new innovative products and developing new indications for existing products—the result of its continuing commitment to research. To enhance its product portfolio, the Company continues to pursue external alliances, from early-stage to late-stage product opportunities, including joint ventures and targeted acquisitions. Additionally, achievement of productivity gains has become a permanent strategy. Productivity initiatives include, at the manufacturing level, optimizing plant utilization, implementing lowest-cost processes and improving technology transfer between research and manufacturing, and throughout the Company, reducing the cost of purchased materials and services, re-engineering core and administrative processes and streamlining the organization. At the manufacturing level, the Company expects that productivity gains will continue to substantially offset inflation on product cost in the core pharmaceuticals business.

The Company is committed to improving access to medicines and enhancing the quality of life for people around the world. Merck's African

Comprehensive HIV/AIDS Partnership in Botswana, in collaboration with the Government of Botswana and the Bill & Melinda Gates Foundation, is striving to develop a comprehensive and sustainable approach to HIV prevention, care and treatment. To further catalyze access to HIV medicines in developing countries, in October 2002 the Company announced that a new 600 mg tablet formulation of its antiretroviral medicine *Stocrin* will be introduced at a price of less than

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one dollar per day in the least developed countries and those hardest hit by the HIV/AIDS epidemic. Through this and other actions, Merck is working with partners in the public and private sectors alike to focus on the real barriers to access to medicines in the developing world: the need for sustainable financing, increased international assistance and additional investments in education, training and health infrastructure and capacity in developing countries.

In 1993, Merck acquired Medco Containment Services, Inc. (renamed Merck–Medco and later, Medco Health). Medco Health provides pharmacy benefit services in the United States. Through its home delivery pharmacies and national network of retail pharmacies, Medco Health provides sophisticated programs and services for its clients and the members of their pharmacy benefit plans, as well as for the physicians and pharmacies the members use. Medco Health's programs and services help its clients control the cost and enhance the quality of the prescription drug benefits they offer to their members. Medco Health's clients include Blue Cross/Blue Shield plans; managed care organizations; insurance carriers; third-party benefit plan administrators; employers; federal, state and local government agencies; and union-sponsored benefit plans.

In January 2002, the Company announced plans to establish Medco Health as a separate, publicly-traded company. Medco Health converted from a limited liability company to a Delaware corporation in May 2002 and changed its name from Merck–Medco Managed Care, L.L.C. to Medco Health Solutions, Inc. In July 2002, the Company announced that due solely to market conditions it was postponing an initial public offering (IPO) of shares of Medco Health and it withdrew the associated equity registration statement. Merck remains fully committed to the establishment of Medco Health as a separate, publicly-traded company and intends to complete the separation in mid-2003, subject to market conditions.

In January 2003, the Company, through its wholly owned subsidiary, MSD (Japan) Co., Ltd., launched a tender offer to acquire, for an estimated aggregate purchase price of \$1.5 billion, the remaining 49% of the common shares of Banyu Pharmaceutical Co., Ltd. (Banyu) that it does not already own. The tender offer, which closes in March 2003, is conditional on the Company receiving at least 76.45 million common shares to bring its share ownership of Banyu to approximately 80% or more. The Company plans to fund the transaction with cash on hand. Japan is the world's second largest pharmaceutical market.

### **Joint Ventures and Other Equity Method Affiliates**

To expand its research base and realize synergies from combining capabilities, opportunities and assets, the Company has formed a number of joint ventures. In 1982, Merck entered into an agreement with Astra AB (Astra) to develop and market Astra's products under a royalty-bearing license. In 1993, the Company's total sales of Astra products reached a level that triggered the first step in the establishment of a joint venture business carried on by Astra Merck Inc. (AMI), in which Merck and Astra each owned a 50% share. This joint venture, formed in November 1994, developed and marketed most of Astra's new prescription medicines in the United States including *Prilosec*, the first of a class of medications known as proton pump inhibitors, which slows the production of acid from the cells of the stomach lining.

In 1998, Merck and Astra completed the restructuring of the ownership and operations of the joint venture whereby the Company acquired Astra's interest in AMI, renamed KBI Inc. (KBI), and contributed KBI's operating assets to a new U.S. limited partnership, Astra Pharmaceuticals L.P. (the Partnership), in exchange for a 1% limited partner interest. Astra contributed the net assets of its wholly owned subsidiary, Astra USA, Inc., to the Partnership in exchange for a 99% general partner interest. The Partnership, renamed AstraZeneca LP (AZLP) upon Astra's 1999 merger with Zeneca Group Plc (the AstraZeneca merger), became the exclusive distributor of the products for which KBI retained rights.

While maintaining a 1% limited partner interest in AZLP, Merck has consent and protective rights intended to preserve its business and economic interests, including restrictions on the power of the general partner to make certain distributions or dispositions. Furthermore, in limited events of default, additional rights will be granted to the Company, including powers to direct the actions of, or remove and replace, the Partnership's chief executive officer and chief financial officer. Merck earns certain Partnership returns as well as ongoing revenue based on sales of current and future KBI products. The Partnership returns include a priority return provided for in the Partnership Agreement, variable returns based, in part, upon sales of certain former Astra USA, Inc. products, and a preferential return representing Merck's share of undistributed AZLP GAAP earnings. These returns, which are recorded as Equity income from affiliates, aggregated \$640.2 million, \$642.8 million and \$637.5 million in 2002, 2001 and 2000, respectively. The AstraZeneca merger triggers a partial redemption of Merck's limited partner interest in 2008. Upon this redemption, AZLP will distribute to KBI an amount based primarily on a multiple of Merck's annual revenue derived from sales of the former Astra USA, Inc. products for the three years prior to the redemption (the Limited Partner Share of Agreed Value).

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In conjunction with the 1998 restructuring, for a payment of \$443.0 million, Astra purchased an option (the Asset Option) to buy Merck's interest in the KBI products, excluding the gastrointestinal medicines *Prilosec* and *Nexium*. The Asset Option is exercisable in 2010 at an exercise price equal to the net present value as of March 31, 2008 of projected future pretax revenue to be received by the Company from the KBI products (the Appraised Value). Merck also has the right to require Astra to purchase such interest in 2008 at the Appraised Value. In addition, the Company granted Astra an option to buy Merck's common stock interest in KBI at an exercise price based on the net present value of estimated future net sales of *Prilosec* and *Nexium*. This option is exercisable two years after Astra's purchase of Merck's interest in the KBI products.

The 1999 AstraZeneca merger constituted a Trigger Event under the KBI restructuring agreements. As a result of the merger, in exchange for Merck's relinquishment of rights to future Astra products with no existing or pending U.S. patents at the time of the merger, Astra paid \$967.4 million (the Advance Payment), which is subject to a true-up calculation in 2008 that may require repayment of all or a portion of this amount. The True-Up Amount is directly dependent on the fair market value in 2008 of the Astra product rights retained by the Company. Accordingly, recognition of this contingent income has been deferred until the realizable amount, if any, is determinable, which is not anticipated prior to 2008.

Under the provisions of the KBI restructuring agreements, because a Trigger Event has occurred, the sum of the Limited Partner Share of Agreed Value, the Appraised Value and the True-Up Amount is guaranteed to be a minimum of \$4.7 billion. Distribution of the Limited Partner Share of Agreed Value and payment of the True-Up Amount will occur in 2008. Astra-Zeneca's purchase of Merck's interest in the KBI products is contingent upon the exercise of either Merck's option in 2008 or AstraZeneca's option in 2010 and, therefore, payment of the Appraised Value may or may not occur.

In 1989, Merck formed a joint venture with Johnson & Johnson to develop and market a broad range of nonprescription medicines for U.S. consumers. This 50% owned joint venture was expanded into Europe in 1993, and into Canada in 1996.

Sales of joint venture products were as follows:

(\$ in millions)	2002	2001	2000
Gastrointestinal products	\$299.0	\$293.5	\$321.1
Other products	114.0	101.5	108.0
	<b>\$413.0</b>	<b>\$395.0</b>	<b>\$429.1</b>

In 1994, Merck and Pasteur Mérieux Connaught (now Aventis Pasteur) established a 50% owned joint venture to market vaccines in Europe and to collaborate in the development of combination vaccines for distribution in Europe. Sales of joint venture products were as follows:

(\$ in millions)	2002	2001	2000
Hepatitis vaccines	\$ 69.4	\$ 88.0	\$134.1
Viral vaccines	34.6	40.5	48.5
Other vaccines	442.4	371.1	358.3
	<b>\$546.4</b>	<b>\$499.6</b>	<b>\$540.9</b>

In 1997, Merck and Rhône-Poulenc (now Aventis) combined their animal health and poultry genetics businesses to form Merial Limited (Merial), a fully integrated animal health company, which is a stand-alone joint venture, equally owned by each party. Merial provides a comprehensive range of pharmaceuticals and vaccines to enhance the health, well-being and performance of a wide range of animal species. Sales of joint venture products were as follows:

(\$ in millions)	2002	2001	2000
Fipronil products	\$ 486.2	\$ 409.7	\$ 345.7
Avermectin products	461.7	495.0	531.7
Other products	777.8	754.8	730.4
	<b>\$1,725.7</b>	<b>\$1,659.5</b>	<b>\$1,607.8</b>



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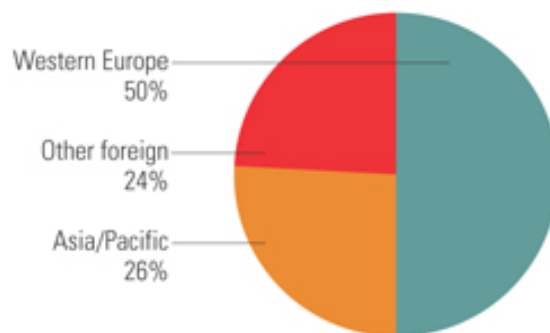
In May 2000, the Company and Schering-Plough Corporation (Schering-Plough) entered into agreements to create separate equally-owned partnerships to develop and market in the United States new prescription medicines in the cholesterol-management and respiratory therapeutic areas. In December 2001, the cholesterol-management partnership agreements were expanded to include all the countries of the world, excluding Japan. In October 2002, ezetimibe, the first in a new class of cholesterol-lowering agents, was approved in the U.S. as *Zetia* and in Germany as *Ezetrol*. The partnerships are also pursuing the development and marketing of *Zetia* as a once-daily combination tablet with *Zocor*. Sales of ezetimibe totaled \$25.3 million in 2002.

In January 2002, Merck/Schering-Plough Pharmaceuticals reported on results of Phase III clinical trials of a fixed combination tablet containing *Singulair* and *Claritin*, Schering-Plough's nonsedating antihistamine, which did not demonstrate sufficient added benefits in the treatment of seasonal allergic rhinitis.

## Foreign Operations

The Company's operations outside the United States are conducted primarily through subsidiaries. Sales of Merck human health products by subsidiaries outside the United States were 39% of Merck human health sales in 2002, and 37% and 36% in 2001 and 2000, respectively.

**Distribution of 2002 Foreign Human Health Sales**



The Company's worldwide business is subject to risks of currency fluctuations and governmental actions. The Company does not regard these risks as a deterrent to further expansion of its operations abroad. However, the Company closely reviews its methods of operations and adopts strategies responsive to changing economic and political conditions.

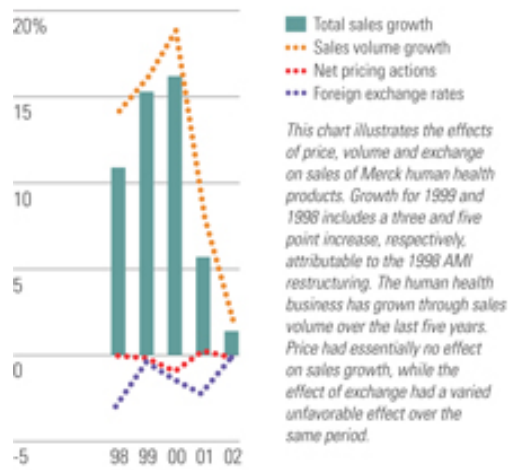
In recent years, Merck has been expanding its operations in countries located in Latin America, the Middle East, Africa, Eastern Europe and Asia Pacific where changes in government policies and economic conditions are making it possible for Merck to earn fair returns. Businesses in these developing areas, while sometimes less stable, offer important opportunities for growth over time.

## Operating Results

Total sales for 2002 increased 9% in total and 3% on a volume basis from 2001. Foreign exchange had essentially no effect on 2002 sales growth. Total sales for 2001 increased 18% in total and 14% on a volume basis from 2000. Foreign exchange had a one point unfavorable effect on 2001 sales growth.

In 2002, sales of Merck human health products grew 1%. Foreign exchange rates had less than a half point unfavorable effect on sales growth and price changes had essentially no effect on sales growth. In measuring these effects, changes in the value of foreign currencies are calculated net of price increases in traditionally hyperinflationary countries, principally in Latin America. Domestic human health sales declined by 2%, reflecting the impact from products affected by patent expirations. While wholesaler purchasing behavior affected quarterly sales levels of certain products during 2002, the estimated net impact of wholesaler buying patterns on the year-on-year change in aggregate domestic sales was minimal. Foreign sales grew 7% in 2002 including a one percentage point unfavorable effect from exchange. Merck's five key human health products, *Zocor*, *Vioxx*, *Fosamax*, *Cozaar/Hyzaar*, and *Singulair*, which represent two-thirds of worldwide human health sales, collectively had increased sales of 14% for 2002. Newer products, *Cancidas* and *Invanz*, experienced unit volume gains as did the more mature products, *Maxalt* and *Cosopt*. Sales from products affected by patent expirations, including *Vasotec*, *Vaseretic*, *Prinivil*, *Prinzide*, *Pepcid* and *Mevacor*, declined 38% from 2001 to \$1.4 billion in total. Merck's consolidated sales growth in 2002 also reflected the impact of Medco Health's sales, which increased 14% over 2001.

### Components of Human Health Sales Growth



*Zocor*, Merck’s cholesterol-modifying medicine, continued its solid performance in 2002 with worldwide sales of \$5.6 billion, an increase of 6% from 2001. Excluding the estimated impact of wholesaler buying patterns, the year-on-year growth of *Zocor* approximated 12%. Worldwide sales for *Zocor* in 2003 are expected to approximate \$5.6 billion to \$5.9 billion. In 2003, *Zocor* will lose its basic patent protection in Canada and certain countries in Europe, including the United Kingdom and Germany, and the Company expects a decline in *Zocor* sales in those countries.

*Zocor* continues to remain a therapy of choice for many physicians because of its proven ability in clinical trials to act favorably on all three key lipid parameters—lowering “bad” LDL cholesterol and triglycerides while raising the level of “good” HDL cholesterol. Clinical trials have demonstrated that *Zocor* has a well-established safety and tolerability profile. Results from the landmark Heart Protection Study (HPS), the largest-ever study using a cholesterol-modifying medicine, showed that *Zocor* 40 mg was proven to save lives by reducing the risk of heart attack and stroke in a broad range of high-risk patients, including people with heart disease and people with diabetes, regardless of their cholesterol levels. A supplemental New Drug Application (sNDA) was filed in the third quarter of 2002 with

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the U.S. Food and Drug Administration (FDA) to incorporate data from HPS into the U.S. label for *Zocor*. Updated federal guidelines, which report that people with diabetes are at increased risk for cardiovascular disease, have increased the number of people in the United States who are eligible for statin therapy by an additional 20 million.

*Vioxx*, Merck's once-a-day coxib, remains the largest and most prescribed arthritis pain medication across many markets worldwide, including Europe, Canada and Latin America. For the year, *Vioxx* sales grew 8% over 2001, achieving \$2.5 billion in sales. Excluding the estimated impact of wholesaler buying patterns, the year-on-year growth of *Vioxx* approximated 1%. In 2003, worldwide sales of coxibs, *Vioxx* and *Arcoxia*, are expected to approximate \$2.6 billion to \$2.8 billion.

Pain relief and gastrointestinal (GI) safety remain important considerations when physicians are choosing a medication for the treatment of arthritis. Since the GI outcomes data from the landmark 8,000-patient *Vioxx* Gastrointestinal Outcomes Research (VIGOR) study were added to the labeling for *Vioxx*, the number of key managed care accounts with *Vioxx* in an advantaged position among coxibs continues to grow. More than 35 million people now have exclusive or preferred access to *Vioxx* through their managed care plans.

An updated analysis combining data from 20 clinical trials of more than 17,000 arthritis patients was presented at the American College of Rheumatology in the fourth quarter of 2002 and underscores the proven GI safety profile of *Vioxx*. This new data showed that *Vioxx* significantly reduced by 62 percent the incidence of confirmed upper-GI perforations, ulcers and bleeds compared to four widely used non-selective non-steroidal anti-inflammatory drugs (NSAIDs). The analysis is consistent with the significant reduction of clinically important GI events versus naproxen seen in the VIGOR study.

Also in clinical studies in acute pain, *Vioxx* has demonstrated superior efficacy to codeine 60 mg with acetaminophen 600 mg as well as oxycodone 5 mg with acetaminophen 325 mg.

France has referred all coxibs on the market or currently under regulatory review to the CPMP, the European scientific regulatory agency, to discuss the gastrointestinal and cardiovascular safety of the coxib class. The Transparency Commission, responsible for pricing and reimbursement in France, is seeking to evaluate the medical benefit of currently marketed coxibs versus traditional NSAIDs.

Merck's new coxib, *Arcoxia*, was launched in 19 countries in 2002, including several in Europe, Latin America and the Asia-Pacific region. *Arcoxia* has been studied in a broad range of indications, including osteoarthritis, adult rheumatoid arthritis, chronic pain, acute pain, dysmenorrhea (menstrual pain) and acute gouty arthritis. The Company announced in June plans to refile an expanded New Drug Application (NDA) for *Arcoxia* with the FDA in the second half of 2003. The Company plans to seek indications for ankylosing spondylitis (a chronic autoimmune disease primarily involving the spine), osteoarthritis, rheumatoid arthritis, chronic pain, dysmenorrhea and acute gouty arthritis.

To enhance its filing for the broad range of acute pain indications, Merck will provide data in the NDA from several ongoing studies on *Arcoxia* in acute pain. In response to the FDA's request, the expanded NDA also will include additional cardiovascular safety data for *Arcoxia* versus a non-naproxen NSAID. Merck is conducting large clinical trials to obtain cardiovascular safety data.

In an investigational study released in October at the American College of Rheumatology, *Arcoxia* 90 mg and 120 mg once daily showed positive results compared to placebo in treating ankylosing spondylitis. In a post-hoc analysis of data from that study, *Arcoxia* once daily provided improved pain relief compared to naproxen 500 mg twice daily at six weeks. In December, results from a study of patients with acute gouty arthritis showed *Arcoxia* 120 mg once daily provided a comparable degree of pain relief as indomethacin (50 mg three times daily).

With the completion of the European Union's Mutual Recognition Procedure, which excluded France and Germany, *Arcoxia* has received medical clearance in the remaining European countries as a once-daily treatment for osteoarthritis, rheumatoid arthritis and acute gouty arthritis.

*Fosamax*, the leading product worldwide for treatment and prevention of postmenopausal, male and glucocorticoid-induced osteoporosis, continued its strong growth in 2002 with sales of \$2.2 billion, an increase of 38% over 2001. The estimated net impact of wholesaler buying patterns on year-on-year *Fosamax* sales growth was minimal. Worldwide sales of *Fosamax* in 2003 are expected to approximate \$2.6 billion to \$2.8 billion.

*Fosamax* Once Weekly has been launched in more than 70 markets worldwide and continues to drive growth in the large, undertreated osteoporosis market around the world. Of the more than 50 million postmenopausal women with osteoporosis worldwide, less than 25 percent are currently diagnosed and treated.

Two studies on *Fosamax* were presented at the annual meeting of the American Society of Bone Mineral Research in September. The first showed that over a ten-year period *Fosamax* provided continuous increases in lumbar spine bone mass. A second study, the first head-to-head study of bisphosphonates, showed that in European patients *Fosamax* 70 mg once weekly increased lumbar spine and hip bone mineral density (BMD) more than risedronate 5 mg once daily using a European dosing regimen.

*Cozaar*, and its companion agent, *Hyzaar* (a combination of *Cozaar* and the diuretic hydrochlorothiazide), are the most prescribed angiotensin II antagonists (AIAs) worldwide for treatment of hypertension. Global sales for the two products were strong in 2002, reaching \$2.2 billion, a 21% increase over 2001. Excluding the estimated impact of wholesaler buying patterns, the year-on-year growth of *Cozaar* and *Hyzaar* approximated 16%. Worldwide sales of *Cozaar* and *Hyzaar* in 2003 are expected to approximate \$2.4 billion to \$2.6 billion. *Cozaar* is experiencing new growth in many major markets outside the United States based on the results of the Losartan Intervention for Endpoint Reduction in Hypertension (LIFE) study announced earlier this year. In the LIFE study, use of *Cozaar* significantly

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reduced the combined risk of cardiovascular morbidity and mortality, most notably stroke, in patients with hypertension and left ventricular hypertrophy (LVH) compared to the beta-blocker atenolol. However, in an analysis of the treatment effect by ethnicity, black patients treated with atenolol were at lower risk of experiencing cardiovascular death, heart attack and stroke compared to patients treated with *Cozaar*, even though both drugs lowered blood pressure to a similar degree. Merck has submitted a supplemental NDA for *Cozaar* based on the results of the LIFE study.

In September, the FDA approved *Cozaar* to reduce the rate of progression of nephropathy (kidney disease) in Type 2 diabetic patients with hypertension and nephropathy. The new indication is based on the Reduction of Endpoint in Non-Insulin Dependent Diabetes Mellitus with the Angiotensin II Antagonist Losartan (RENAAL) study, which showed that while *Cozaar* had no effect on overall mortality, it significantly delayed progression to end-stage renal disease (ESRD), a condition requiring dialysis or kidney transplantation for survival.

In 2001, Merck and E.I. du Pont de Nemours and Company (DuPont) began sharing equally the operating profits from *Cozaar* and *Hyzaar* in North America, under terms of the license agreement established between the parties in 1989. Financial terms outside of North America were not changed.

*Singulair*, Merck's once-a-day leukotriene receptor antagonist continued its strong performance in 2002 as an asthma controller. Total 2002 sales of *Singulair* were \$1.5 billion, an increase of 19% over 2001. Excluding the estimated impact of wholesaler buying patterns, the year-on-year growth of *Singulair* approximated 26%. Worldwide sales of *Singulair* in 2003 are expected to approximate \$2.0 billion to \$2.3 billion. *Singulair* is the No. 1 prescribed asthma controller among allergists and pediatricians in the United States, and since its launch in 1998, more than 40 million prescriptions of *Singulair* have been dispensed to patients.

Positive results from a major European trial involving *Singulair* were presented at the European Respiratory Society meeting in Stockholm in September. The European study showed *Singulair* dosed once-a-day, taken with the inhaled corticosteroid (ICS) budesonide dosed at 800 mg per day, was at least as effective in controlling asthma as budesonide alone at double the dose (1600 mg per day), as measured by morning peak flow rate (a measure of lung function).

In December, the FDA approved *Singulair* for the relief of symptoms of seasonal allergic rhinitis (also known as hay fever) in adults and children as young as two years of age. Most currently available oral allergy medications work by blocking histamine, one of several causes of allergy symptoms. *Singulair* is a new and different way to treat seasonal allergies because it blocks leukotrienes instead of blocking histamine. A convenient once-a-day tablet, *Singulair* helps relieve a broad range of seasonal allergy symptoms for 24 hours.

Sales growth in 2002 also benefited from *Cancidas*, which is the first in a new class of anti-fungals, called echinocandins or glucan synthesis inhibitors, introduced in more than a decade. *Cancidas* is used to treat certain life-threatening fungal infections that are becoming more prevalent as the number of people with compromised immune systems increases. This new medicine is indicated for the treatment of candidemia (bloodstream infection) and the following *Candida* infections: intra-abdominal abscesses, peritonitis (infections within the lining of the abdominal cavity) and pleural space infections (infections within the lining of the lung). It is also indicated for esophageal candidiasis, and in invasive aspergillosis in patients who do not respond to or cannot tolerate other anti-fungal therapies, such as amphotericin B, lipid formulations of amphotericin B and/or itraconazole.

Other products experiencing growth in 2002 include *Maxalt* for the treatment of acute migraine headaches in adults, *Cosopt* to treat glaucoma, and the recently launched *Invanz* for the treatment of selected moderate to severe infection in adults. *Crixivan*, though still contributing to 2002 sales, declined in unit volume due to therapeutic competition. Supply sales of *Prilosec* and *Nexium* to AZLP also contributed to 2002 sales. Total supply sales to AZLP in 2003 are expected to decline at a mid-single digit percentage rate.

In October, Merck/Schering-Plough Pharmaceuticals announced the FDA approval of *Zetia* (ezetimibe), the first in a new class of cholesterol-lowering agents that inhibits the intestinal absorption of cholesterol. The once-daily tablet of *Zetia* 10 mg was approved for use either by itself or together with a statin to reduce LDL cholesterol and total cholesterol in patients with high cholesterol. In clinical trials, *Zetia* showed significant additional reductions in LDL cholesterol when added to any dose of any statin, and was generally well tolerated with an overall side effect profile similar to statin alone. Initial launch performance in the United States has been strong with more than 100,000 prescriptions written. The U.S. approval of *Zetia* was supported by nine pivotal Phase III studies evaluating the efficacy and safety of *Zetia* for use in patients with high cholesterol.

Marketing approval was received in October in Germany under the brand name *Ezetrol* for use alone and with all marketed statins for the treatment of elevated cholesterol levels. The approval of ezetimibe in Germany represents the first step in seeking marketing approval throughout the EU under the mutual recognition procedure.

The Company records its interest in the Merck/Schering-Plough partnerships in equity income from affiliates.

In 2001, sales of Merck human health products grew 6%. Foreign exchange rates had a three percentage point unfavorable effect on sales growth, while price changes had less than a half point favorable effect on growth. Domestic sales growth was 5%, while foreign sales grew 7% including a seven percentage point unfavorable effect from exchange. The unit volume growth from sales of Merck human health products was driven by five key products: *Zocor*, *Vioxx*, *Cozaar/Hyzaar*, *Fosamax* and *Singulair*. Also contributing to Merck's human health volume growth were *Proscar*, *Maxalt* and *Candida*.

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### Costs, Expenses and Other

(\$ in millions)	2002	Change	2001	Change	2000
Materials and production	\$33,053.6	+14%	\$28,976.5	+29%	\$22,443.5
Marketing and administrative	6,186.8	- 1%	6,224.4	+ 1%	6,167.7
Research and development	2,677.2	+ 9%	2,456.4	+ 5%	2,343.8
Equity income from affiliates	(644.7)	- 6%	(685.9)	- 10%	(764.9)
Other (income) expense, net	303.8	-11%	341.7	- 2%	349.0
	\$41,576.7	+11%	\$37,313.1	+22%	\$30,539.1

In 2002, materials and production costs increased 14% compared to a 9% sales growth rate. Excluding the effect of exchange and inflation, these costs increased 4%, one point higher than the unit sales volume growth in 2002. The higher growth rate in these costs over the sales volume growth is primarily attributable to the significant growth in Medco Health's historically lower-margin business. In 2001, materials and production costs increased 29%, compared to an 18% sales growth rate primarily attributable to growth in the lower-margin Medco Health business. Excluding the effect of exchange and inflation, these costs increased 19%, five points higher than the unit sales volume growth in 2001.

Gross margin was 36.2% in 2002 compared to 39.3% in 2001 and 44.4% in 2000. Gross margin reductions in 2002 reflect the growth in the Medco Health business as well as effects from product mix in the core pharmaceuticals business. In 2003, the Company expects that manufacturing productivity will offset inflation on product cost in the core pharmaceuticals business.

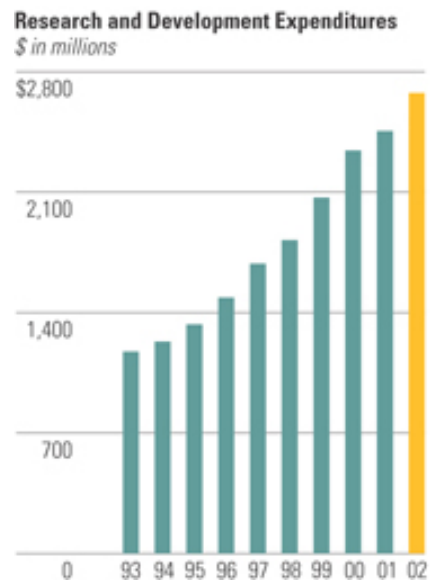
Marketing and administrative expenses decreased 1% in total and 4% on a volume basis in 2002. Marketing and administrative spending reflects the impact of sales force expansions and launch costs in support of new product introductions and new indications, as well as savings from operational-efficiency and work redesign initiatives which reduced the Company's overall cost structure. Marketing and administrative expenses for 2003 are estimated to grow at a mid-single digit percentage rate over the full-year 2002 expense.

In 2001, marketing and administrative expenses increased 1% in total and were essentially level with 2000 on a volume basis, including a one point decrease attributable to marketing expenses, reflecting the success of operational efficiency initiatives and increased resource commitment to Merck's five key growth drivers. Marketing and administrative expenses as a percentage of sales were 12% in 2002, 13% in 2001 and 15% in 2000. The continuous improvement in the ratios over 2000 primarily reflects the lower growth of marketing and administrative costs relative to Medco Health's sales growth and the sustained impact of operational efficiency initiatives.

Research and development expenses increased 9% in 2002. Excluding the effects of exchange and inflation, these expenses increased 6%. Research and development reflects increased investment in later stage products, continued significant investment in basic research, which increased 14% in 2002, as well as strategic spending on outside licensing efforts. Research and development expenses increased 5% in 2001. Excluding the effect of exchange and inflation, these expenses increased 3%.

Research and development in the pharmaceutical industry is inherently a long-term process. The following data show an unbroken trend of year-to-year increases in the Company's research and development spending. For the period 1993 to 2002, the compounded annual growth rate in research and development was 9%. Research and development expenses for 2003 are estimated to grow 10 to 12 percent over the full-year 2002 expense.





Equity income from affiliates reflects the favorable performance of the Company's joint ventures and partnership returns from AZLP. In 2002, the decrease in equity income from affiliates primarily reflects the impact of the Company's share of launch expenses for *Zetia* and ongoing research and development expenses associated with the Merck/Schering-Plough

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partnerships. The contribution of this collaboration will continue to be negative in 2003 as sales of ezetimibe will be more than offset by launch expenses for the product and ongoing research and development spending. In 2001, the decrease in equity income from affiliates primarily reflects the impact of the Company's share of research and development expenses associated with the Merck/Schering-Plough partnerships.

The decrease in other expense, net, in 2002 reflects decreased amortization expense resulting from the implementation of Financial Accounting Standards Board Statement No. 142, Goodwill and Other Intangibles (FAS 142), under which goodwill is no longer amortized, lower minority interest expense and losses on investments. In 2001, the decrease in other expense, net, was primarily attributable to higher interest income, lower minority interest expense and increased gains on sales of investments. This decrease was partially offset by lower exchange gains resulting from the translation of the Company's balance sheet and the effect of income recorded in 2000 from the settlement of disputed proceeds related to the AstraZeneca merger.

## Earnings

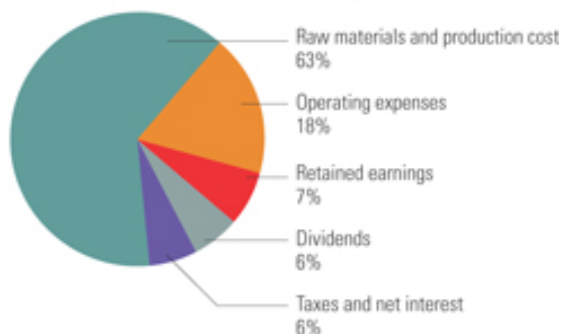
<i>(\$ in millions except per share amounts)</i>	2002	Change	2001	Change	2000
Net income	\$7,149.5	-2%	\$7,281.8	+7%	\$6,821.7
As a % of sales	13.8%		15.3%		16.9%
As a % of average total assets	15.6%		17.3%		17.9%
Earnings per common share assuming dilution	\$ 3.14	—	\$ 3.14	+8%	\$ 2.90

The Company's effective income tax rate was 30.0% in 2002 and 2001, and 30.6% in 2000. The consolidated 2003 effective income tax rate is estimated to be approximately 29.5% to 30.5%.

Net income in 2002 was 2% lower than 2001. Net income was up 7% in 2001 over 2000. Net income as a percentage of sales was 13.8% in 2002 compared to 15.3% in 2001 and 16.9% in 2000. The decline in the ratios from 2000 is principally due to a higher growth rate in Medco Health's historically lower-margin business, offset in part by the lower growth in marketing and administrative expenses. Foreign currency exchange had a one percentage point unfavorable effect on the growth rate in 2002 compared to a three percentage point unfavorable effect in 2001. Net income as a percentage of average total assets was 15.6% in 2002, 17.3% in 2001 and 17.9% in 2000. Earnings per common share assuming dilution was at the same level in 2002 as 2001 and grew 8% in 2001. In 2002, net income and earnings per common share assuming dilution reflect the benefit from implementation of FAS 142. The more favorable growth rates of earnings per common share assuming dilution compared to net income are a result of treasury stock purchases.

The Company anticipates full-year 2003 consolidated earnings per common share assuming dilution of \$3.40 to \$3.47, which reflects the expectation for double digit earnings per share growth in the core pharmaceuticals business on a stand-alone basis and includes a full year of net income from Medco Health. The Company's intention to separate the Medco Health business in mid-2003, subject to market conditions, remains unchanged. After the separation has occurred, the Company will adjust its 2003 consolidated earnings expectations to reflect the separation, as appropriate.

Distribution of 2002 Sales and Equity Income



The following supplemental information and discussion represents the core pharmaceuticals business stand-alone summarized operating results of Merck excluding Medco Health and the stand-alone summarized operating results of Medco Health. The combination of the historical stand-alone operating results of Merck and Medco Health will not equal Merck's consolidated operating results. Certain consolidating adjustments are necessary in the preparation of such

consolidated operating results, associated primarily with sales of Merck products by Medco Health and related rebates received by Medco Health from Merck. The financial information included herein may not be indicative of the consolidated operating results of either Merck or Medco Health in the future, or what they would have been had Medco Health been a separate company during the periods presented. Statement of Financial Accounting Standards No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets (FAS 144), which was effective for the Company on January 1, 2002, precludes the reporting of a business to be distributed to stockholders as discontinued operations until the disposal date.

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### Merck & Co., Inc. Core Pharmaceuticals Business on a Stand-alone Basis

<i>(\$ in millions)</i>	2002	2001
Sales	<b>\$21,445.8</b>	\$21,199.0
Materials and production	<b>3,907.1</b>	3,624.8
Income before taxes	<b>9,651.7</b>	9,948.1
Net income	<b>6,794.8</b>	7,053.2

In 2002, sales in Merck's core pharmaceuticals business on a stand-alone basis grew 1%. Gross margin was 81.8% in 2002 compared to 82.9% in 2001. The decrease is primarily attributable to the effect of changes in product mix. Net income as a percentage of sales was 31.7% in 2002 compared to 33.3% in 2001, reflecting the gross margin reduction as well as continued investment in research and development.

### Medco Health on a Stand-alone Basis

<i>(\$ in millions)</i>	2002	2001
Total net revenues	<b>\$32,958.5</b>	\$29,070.6
Total cost of revenues	<b>31,657.7</b>	27,786.7
Income before taxes	<b>620.3</b>	518.3
Net income	<b>361.6</b>	256.6

Medco Health continued to deliver strong sales growth in 2002. Net revenues, reported on a stand-alone basis, reached \$33.0 billion, a 13% increase over 2001 as Medco Health managed over 548 million prescriptions during the year. The net revenues increase primarily reflects increased prices charged by manufacturers and increased representation of new and higher cost drugs in the brand name prescription base as well as higher prescription drug utilization. Medco Health's home delivery service, which is the largest in the pharmacy benefit management (PBM) industry, continued to expand throughout 2002. Medco Health's home delivery prescriptions for the year grew to 82 million in 2002, and now represent 15 percent of Medco Health's total prescription volume. In 2002, Medco Health experienced a 51 percent increase over 2001 in the number of prescriptions processed through its member website, [www.medcohealth.com](http://www.medcohealth.com), with prescription volume of 11 million.

Since 2000, Medco Health has provided PBM services to United Health Group, its largest client, under a five-year contract. Revenues from United Health Group represented approximately 16% of Medco Health's net revenues and totaled \$5.3 billion and \$4.6 billion in 2002 and 2001, respectively.

Medco Health's gross margin was 3.9% and 4.4% for 2002 and 2001, respectively. The decrease in margin reflects the impact of competitive pricing pressures, reduced discounting by pharmaceutical manufacturers and operating costs resulting from new business initiated in the beginning of 2002.

In accordance with FAS 142, Medco Health's 2002 income before taxes and net income does not reflect goodwill amortization, which totaled \$106.9 million in 2001.

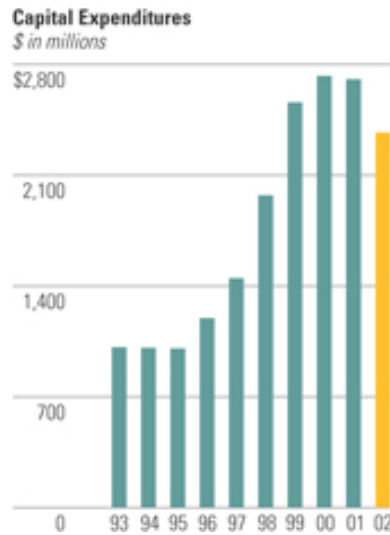
Medco Health's net income on a stand-alone basis is estimated to grow 20 percent to 25 percent for full-year 2003, driven primarily by increased use of generics and home delivery as well as automation.

### Capital and Environmental Expenditures

Capital expenditures were \$2.4 billion in 2002 and \$2.7 billion in 2001. Expenditures in the United States were \$1.8 billion in 2002 and \$2.1 billion in 2001. Expenditures during 2002 included \$839.3 million for production facilities, \$746.6 million for research and development facilities, \$186.7 million for environmental projects, and \$597.1 million for administrative, safety and general site projects. Capital expenditures approved but not yet spent at December 31, 2002 were \$2.2 billion. Capital expenditures for 2003 are estimated to be \$2.3 billion.

The Company believes that it is in compliance in all material respects with applicable environmental laws and regulations. Capital expenditures for environmental protection are forecasted to exceed \$525.0 million for the years 2003 through 2007. In addition, the Company's operating and maintenance expenditures for pollution control were approximately \$87.8 million in 2002. Expenditures for this purpose for the years 2003 through 2007 are forecasted to approximate \$515.0 million. Expenditures for remediation and environmental liabilities were \$31.1 million in 2002, and are estimated at \$107.0 million for the years 2003 through 2007.

Depreciation was \$1.2 billion in 2002 and \$1.1 billion in 2001, of which \$898.8 million and \$777.1 million, respectively, applied to locations in the United States.



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### Analysis of Liquidity and Capital Resources

In 2002, net cash provided by operating activities was \$9.5 billion. Cash provided by operations continues to be the Company's primary source of funds to finance operating needs and capital expenditures. This cash was used to fund capital expenditures of \$2.4 billion, to pay Company dividends of \$3.2 billion and to partially fund the purchase of treasury shares. At December 31, 2002, the total of worldwide cash and investments was \$12.2 billion, including \$5.0 billion of cash, cash equivalents and short-term investments, and \$7.2 billion of long-term investments. The above totals include \$1.2 billion in cash and investments held by Banyu.

### Selected Data

(\$ in millions)	2002	2001	2000
Working capital	<b>\$2,458.7</b>	\$1,417.4	\$3,643.8
Total debt to total liabilities and equity	<b>18.0</b>		
	%	20.1 %	17.2 %
Cash provided by operations to total debt	<b>1.1:1</b>	1.0:1	1.1:1

Working capital levels are more than adequate to meet the operating requirements of the Company. The ratios of total debt to total liabilities and equity and cash provided by operations to total debt reflect the strength of the Company's operating cash flows and the ability of the Company to cover its contractual obligations.

The Company's contractual obligations as of December 31, 2002 are as follows:

### Payments Due by Period

(\$ in millions)	Total	2003	2004–2005	2006–2007	Thereafter
Loans payable and current portion of long-term debt	\$3,669.8	\$3,669.8	\$ —	\$ —	\$ —
Long-term debt	4,879.0	—	1,348.7	572.3	2,958.0
Operating leases	513.9	160.1	214.1	85.6	54.1
	\$9,062.7	\$3,829.9	\$ 1,562.8	\$ 657.9	\$ 3,012.1

Loans payable and current portion of long-term debt includes \$500.0 million of notes with a final maturity in 2011, which, on an annual basis, will either be repurchased from the holders at the option of the remarketing agent and remarketed, or redeemed by the Company. Loans payable and current portion of long-term debt also reflects \$220.4 million of long-dated notes that are subject to repayment at the option of the holders on an annual basis.

At December 31, 2002, \$1.5 billion of variable rate preferred units issued by a wholly-owned subsidiary, which are redeemable at the option of the holders beginning in 2010, are included in minority interests.

In 2001, the Company's \$1.5 billion shelf registration statement filed with the Securities and Exchange Commission for the issuance of debt securities became effective. During 2002, the Company issued \$107.5 million of variable rate notes under the shelf. In February 2003, the Company issued \$500.0 million of 4.4% ten-year notes and \$55.0 million of variable rate notes under the shelf. The remaining capacity under the Company's shelf registration statement is \$1.2 billion.

The Company's strong financial position, as evidenced by its triple-A credit ratings from Moody's and Standard & Poor's on outstanding debt issues, provides a high degree of flexibility in obtaining funds on competitive terms. The ability to finance ongoing operations primarily from internally generated funds

is desirable because of the high risks inherent in research and development required to develop and market innovative new products and the highly competitive nature of the pharmaceutical industry. The Company does not participate in any off-balance sheet arrangements involving unconsolidated subsidiaries that provide a material source of financing or potentially expose the Company to material unrecorded financial obligations.

In February 2000, the Board of Directors approved purchases of up to \$10.0 billion of Merck shares. In July 2002, the Board of Directors also approved purchases over time of up to an additional \$10.0 billion of Merck shares. From 2000 to 2002, the Company purchased \$1.1 billion of treasury shares under previously authorized completed programs, and \$8.4 billion under the 2000 program. Total treasury stock purchased in 2002 was \$2.1 billion. For the period 1993 to 2002, the Company has purchased 509.5 million shares at a total cost of \$24.4 billion.

While the U.S. dollar is the functional currency of the Company's foreign subsidiaries, a significant portion of the Company's revenues are denominated in foreign currencies. Merck relies on sustained cash flows generated from foreign sources to support its long-term commitment to U.S. dollar-based research and development. To the extent the dollar value of cash flows is diminished as a result of a strengthening dollar, the Company's ability to fund research and other dollar-based strategic initiatives at a consistent level may be impaired. The Company has established revenue hedging and balance sheet risk management programs to protect against volatility of future foreign currency cash flows and changes in fair value caused by volatility in foreign exchange rates.

The objective of the revenue hedging program is to reduce the potential for longer-term unfavorable changes in foreign exchange to decrease the U.S. dollar value of future cash flows derived from foreign currency denominated sales, primarily the euro and Japanese yen. To achieve this objective, the Company will partially hedge anticipated third party sales that are expected to occur over its planning cycle, typically no more than three years into the future. The Company will layer in hedges over time, increasing the portion of sales hedged as it gets closer to the expected date of the transaction, such that it is probable the hedged transaction will occur. The portion of sales hedged is based on assessments of cost-benefit profiles that consider natural offsetting exposures, revenue and exchange

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rate volatilities and correlations, and the cost of hedging instruments. The hedged anticipated sales are a specified component of a portfolio of similarly denominated foreign currency-based sales transactions, each of which responds to the hedged risk in the same manner. Merck manages its anticipated transaction exposure principally with purchased local currency put options which provide the Company with a right, but not an obligation, to sell foreign currencies in the future at a predetermined price. If the U.S. dollar strengthens relative to the currency of the hedged anticipated sales, total changes in the options' cash flows fully offset the decline in the expected future U.S. dollar cash flows of the hedged foreign currency sales. Conversely, if the U.S. dollar weakens, the options' value reduces to zero, but the Company benefits from the increase in the value of the anticipated foreign currency cash flows. While a weaker U.S. dollar would result in a net benefit, the market value of the Company's hedges would have declined by \$18.4 million and \$11.9 million, respectively, from a uniform 10% weakening of the U.S. dollar at December 31, 2002 and 2001. The market value was determined using a foreign exchange option pricing model and holding all factors except exchange rates constant. Because Merck uses purchased local currency put options, a uniform weakening of the U.S. dollar will yield the largest overall potential loss in the market value of these options. The sensitivity measurement assumes that a change in one foreign currency relative to the U.S. dollar would not affect other foreign currencies relative to the U.S. dollar. Although not predictive in nature, the Company believes that a 10% threshold reflects reasonably possible near-term changes in Merck's major foreign currency exposures relative to the U.S. dollar. Over the last three years, the program has reduced the volatility of cash flows and mitigated the loss in value of cash flows during periods of relative strength in the U.S. dollar for the portion of revenues hedged. The cash flows from these contracts are reported as operating activities in the Consolidated Statement of Cash Flows.

The primary objective of the balance sheet risk management program is to protect the U.S. dollar value of foreign currency denominated net monetary assets from the effects of volatility in foreign exchange that might occur prior to their conversion to U.S. dollars. Merck principally utilizes forward exchange contracts which enable the Company to buy and sell foreign currencies in the future at fixed exchange rates and economically offset the consequences of changes in foreign exchange on the amount of U.S. dollar cash flows derived from the net assets. Merck routinely enters into contracts to fully offset the effects of exchange on exposures denominated in developed country currencies, primarily the euro and Japanese yen. For exposures in developing country currencies, the Company will enter into forward contracts on a more limited basis and only when it is deemed economical to do so based on a cost-benefit analysis which considers the magnitude of the exposure and the volatility of the exchange rate. The Company will also minimize the effect of exchange on monetary assets and liabilities by managing operating activities and net asset positions at the local level. The Company also uses forward contracts to hedge the changes in fair value of certain foreign currency denominated available-for-sale securities attributable to fluctuations in foreign currency exchange rates. A sensitivity analysis to changes in the value of the U.S. dollar on foreign currency denominated derivatives, investments and monetary assets and liabilities indicated that if the U.S. dollar uniformly strengthened by 10% against all currency exposures of the Company at December 31, 2002 and 2001, Income before taxes would have declined by \$10.9 million and \$2.5 million, respectively. Because Merck is in a net long position relative to its major foreign currencies after consideration of forward contracts, a uniform strengthening of the U.S. dollar will yield the largest overall potential net loss in earnings due to exchange. This measurement assumes that a change in one foreign currency relative to the U.S. dollar would not affect other foreign currencies relative to the U.S. dollar. Although not predictive in nature, the Company believes that a 10% threshold reflects reasonably possible near-term changes in Merck's major foreign currency exposures relative to the U.S. dollar. The cash flows from these contracts are reported as operating activities in the Consolidated Statement of Cash Flows.

In addition to the revenue hedging and balance sheet risk management programs, the Company may use interest rate swap contracts on certain investing and borrowing transactions to manage its net exposure to interest rate changes and to reduce its overall cost of borrowing. The Company does not use leveraged swaps and, in general, does not leverage any of its investment activities that would put principal capital at risk. The Company is a party to two \$500.0 million notional amount pay-floating, receive-fixed interest rate swap contracts designated as hedges of the fair value changes in \$500.0 million each of five-year and three-year fixed rate notes attributable to changes in the benchmark LIBOR swap rate. The swaps effectively convert the fixed rate obligations to floating rate instruments. The Company is also a party to a seven-year combined interest rate and currency swap contract entered into in 1997 which converts a variable rate foreign currency denominated investment to a variable rate U.S. dollar investment. The swap contract hedges the changes in the fair value of the investment attributable to fluctuations in exchange rates while allowing the Company to receive variable rate returns. The cash flows from these contracts are reported as operating activities in the Consolidated Statement of Cash Flows.

The Company's investment portfolio includes cash equivalents and short-term investments, the market values of which are not significantly impacted by changes in interest rates. The market value of the Company's medium- to long-term fixed rate investments is modestly impacted by changes in U.S. interest rates. Changes in medium- to long-term U.S. interest rates would have a more significant impact on the market value of the Company's fixed-rate borrowings, which generally have longer maturities. A sensitivity analysis to measure potential changes in the market value of the Company's investments, debt and



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related swap contracts from a change in interest rates indicated that a one percentage point increase in interest rates at December 31, 2002 and 2001 would have positively impacted the net aggregate market value of these instruments by \$109.9 million and \$26.3 million, respectively. A one percentage point decrease at December 31, 2002 and 2001 would have negatively impacted the net aggregate market value by \$162.7 million and \$89.1 million, respectively. The increased sensitivity of the Company's aggregate investment and debt portfolio at December 31, 2002 reflects a decrease in the weighted average maturity of the Company's investments. The fair value of the Company's debt was determined using pricing models reflecting one percentage point shifts in the appropriate yield curves. The fair value of the Company's investments was determined using a combination of pricing and duration models. Whereas duration is a linear approximation that works well for modest changes in yields and generates a symmetrical result, pricing models reflecting the convexity of the price/yield relationship provide greater precision and reflect the asymmetry of price movements for interest rate changes in opposite directions. The impact of convexity is more pronounced in longer-term maturities and low interest rate environments.

## **Recently Issued Accounting Standards**

In July 2002, the Financial Accounting Standards Board (FASB) issued Statement No. 146, Accounting for Costs Associated with Exit or Disposal Activities (FAS 146), which is effective for exit or disposal activities initiated after December 31, 2002. Adoption of FAS 146, which requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan, will have no impact on the Company's financial position or results of operations.

In November 2002, the FASB issued Interpretation No. 45, Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others (FIN 45). FIN 45 requires that a liability be recorded in the guarantor's balance sheet at fair value upon issuance of a guarantee. The recognition provisions of FIN 45 are effective for guarantees issued or modified after December 31, 2002. Adoption of FIN 45 will have no impact on the Company's financial position or results of operations.

In January 2003, the FASB issued Interpretation No. 46, Consolidation of Variable Interest Entities (FIN 46). FIN 46 requires a variable interest entity (VIE) to be consolidated when a company is subject to the majority of the risk of loss from the VIE's activities or is entitled to receive the majority of the entity's residual returns, or both. The consolidation requirements for newly-created VIEs and the transitional disclosure provisions of FIN 46 are effective for the Company immediately. Adoption of FIN 46 will have no impact on the Company's financial position or results of operations.

## **Critical Accounting Policies and Other Matters**

The consolidated financial statements include certain amounts that are based on management's best estimates and judgments. Estimates are used in determining such items as provisions for rebates, discounts and returns, and income taxes, depreciable and amortizable lives, pension and other postretirement benefit plan assumptions, and amounts recorded for contingencies, environmental liabilities and other reserves. Because of the uncertainty inherent in such estimates, actual results may differ from these estimates. While the Company is not aware of reasonably likely events or circumstances which would result in different amounts being reported that would have a material impact on results of operations or financial condition, application of the following accounting policies result in accounting estimates having the potential for the most significant impact on the financial statements.

### *Revenue Recognition*

#### Merck

Revenues from sales of Merck human health products are recognized upon shipment of product. Revenues are recorded net of provisions for rebates, discounts and returns, which are established at the time of sale. Accruals for rebates and discounts cover discounts that result from sales to a Merck customer through an intermediary wholesale purchaser as well as rebates owed based upon contractual agreements or legal requirements with benefit providers, including Medicaid, after the final dispensing of the product by a pharmacy to a benefit plan participant. The accruals are estimated at the time of sale based on available information regarding the portion of sales on which rebates and discounts can be earned, adjusted as appropriate for specific known events, and reflecting the prevailing contractual discount rate. Amounts accrued for rebates and discounts may be adjusted when trends or significant events indicate that adjustment is appropriate. Accruals are also adjusted to reflect actual amounts paid or credited upon the validation of claims data. Such adjustments have not been material to results of operations.

#### Medco Health

Medco Health revenues consist principally of sales of prescription drugs through managed prescription drug programs, either from its home delivery pharmacies or its networks of contractually affiliated retail pharmacies. Revenues are recognized when the prescriptions are dispensed through its home delivery pharmacies or retail pharmacies in its contractually affiliated networks. Medco Health's responsibilities under client contracts to adjudicate member claims properly and control clients' drug spend, its separate contractual pricing relationships and responsibilities to the retail pharmacies in its networks, and its interaction with members, among other indicators, qualify Medco Health as the principal under the indicators set forth in Emerging Issues Task Force Issue No. 99-19, Reporting Gross Revenue as a Principal vs. Net as an Agent (EITF 99-19), in most of its transactions with customers. Medco Health's responsibilities under



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client contracts include validating that the patient is a member of the client's plan and that the prescription drug is in the applicable formulary, instructing the pharmacist as to the prescription price and the copayment due from the patient, identifying possible adverse drug interactions for the pharmacist to address with the physician prior to dispensing, suggesting medically appropriate generic alternatives to control drug cost to the clients and their members, and approving the prescription for dispensing. Revenues are recognized from Medco Health's home delivery pharmacies and retail network contracts where it is the principal, on a gross reporting basis, in accordance with EITF 99-19 at the prescription price (ingredient cost plus dispensing fee) negotiated with the clients, including the portion of the price to be settled directly by the member (copayment) plus Medco Health's administrative fees. Although Medco Health does not have credit risk with respect to retail copayments, all of the above indicators of gross treatment are present. In addition, these copayments are viewed as a mechanism that Medco Health negotiates with its clients to help them manage their retained prescription drug spending costs, and the level of copayments does not affect Medco Health's rebates or margin on the transaction. Retail copayments included in Medco Health revenues and cost of revenues totaled \$6.5 billion, \$5.5 billion and \$4.0 billion in 2002, 2001 and 2000, respectively. Where the terms of the contracts and nature of Medco Health's involvement in the prescription fulfillment process do not qualify it as a principal under EITF 99-19, revenues on those transactions consist of the administrative fee paid to Medco Health by its clients.

Medco Health deducts from revenues the manufacturers' rebates it pays to its clients when its clients earn these rebates. Medco Health estimates these rebates at period-end based on actual and estimated claims data and the estimates of the portion of those claims on which the clients can earn rebates. Medco Health bases the estimates on the best available data at period-end and recent history for the various factors that can affect the amount of rebates due to the client. Medco Health adjusts the rebates payable to clients to the actual amounts paid when these rebates are paid, generally on a quarterly basis, or as significant events occur. Medco Health records any cumulative effect of these adjustments against revenues as identified, and adjusts the estimates prospectively to consider recurring matters. Adjustments generally result from contract changes with the clients, differences between the estimated and actual product mix subject to rebates or whether the product was included in the applicable formulary. Adjustments have not been material to results of operations. Medco Health also deducts from revenues discounts offered and other payments made to its clients. Other payments include, for example, implementation allowances, payments made under risk-sharing agreements with clients and payments related to performance guarantees. Where Medco Health provides implementation or other allowances to clients upon contract initiation, it capitalizes these payments and amortizes them against revenue over the life of the contract only if these payments are refundable upon cancellation or relate to non-cancelable contracts. In the limited instances where Medco Health enters into risk-sharing agreements whereby it agrees to share in the risk of a client's drug trend increasing above certain levels, Medco Health determines on a regular basis any potential deduction from revenue by comparing the client's increase in drug spending for that period against a specified contractual or indexed target rate. Where the client's rate of increase exceeds that target, Medco Health calculates a deduction from revenue in accordance with the terms of the contract, up to the contractual cap on its liability. Medco Health manages its risk from this type of arrangement by restricting the number of client contracts that include risk sharing, capping its responsibility under these provisions and requiring the client to implement drug cost management programs. Accordingly, Medco Health's exposure under risk-sharing arrangements is not material to financial position or liquidity.

Rebates receivable from pharmaceutical manufacturers are earned based upon dispensing of prescriptions at either home delivery pharmacies or pharmacies in Medco Health's retail networks, are recorded as a reduction of Medco Health's cost of revenues and are included in accounts receivable. Medco Health accrues rebates receivable by multiplying estimated rebatable prescription drugs dispensed by its home delivery pharmacies, or dispensed by one of the pharmacies in its retail networks, by the contractually agreed manufacturer rebate amount. Medco Health revises rebates receivable estimates to actual, with the difference recorded to cost of revenues, when final rebatable prescriptions are calculated and rebates are billed to the manufacturer, generally 45 to 90 days subsequent to the end of the applicable quarter. Historically, the effect of adjustments resulting from the reconciliation of rebates recognized and recorded to actual amounts billed has not been material to results of operations. Rebates earned by Medco Health from pharmaceutical manufacturers excluding Merck totaled \$2.0 billion, \$2.1 billion and \$1.6 billion in 2002, 2001 and 2000, respectively. Rebates received by Medco Health from Merck and, accordingly, eliminated upon consolidation, approximated \$443.9 million, \$439.4 million and \$350.5 million, respectively. Rebates payable to clients are estimated and accrued concurrently with rebates receivable. Rebates are paid to clients based on actual drug spend on a quarterly basis after collection of rebates receivable from manufacturers at which time rebates payable are revised to reflect amounts due. Typically, Medco Health's client contracts give the client the right to audit the calculation of rebates owed to the client. To date, adjustments related to client audits have not been material.

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### *Pensions and Other Postretirement Benefit Plans*

Net pension and other postretirement benefit cost totaled \$190.7 million in 2002 and \$181.9 million in 2001. Pension and other postretirement benefit plan information for financial reporting purposes is calculated using actuarial assumptions including a discount rate for plan benefit obligations and an expected rate of return on plan assets.

The Company reassesses its benefit plan assumptions on a regular basis. For both the pension and other postretirement benefit plans, the discount rate is evaluated annually and modified to reflect the prevailing market rate at December 31 of a portfolio of high-quality (AA and above) fixed-income debt instruments that would provide the future cash flows needed to pay the benefits included in the benefit obligation as they come due. At December 31, 2002, the Company changed its discount rate to 6.5% from 7.25% for its U.S. pension and other postretirement benefit plans.

The expected rate of return for both the pension and other postretirement benefit plans represents the average rate of return to be earned on plan assets over the period the benefits included in the benefit obligation are to be paid. In developing the expected rate of return, the Company considers long-term compound annualized returns of historical market data as well as historical actual returns on the Company's plan assets. Using this reference information, the Company develops forward-looking return expectations for each asset category and a weighted average expected long-term rate of return for a targeted portfolio allocated across these investment categories. As a result of this analysis, for 2003, the Company changed its expected rate of return from 10.0% to 8.75% for its U.S. pension and other postretirement benefit plans.

The targeted investment portfolio of the Company's U.S. pension plans is allocated 45% to 60% in U.S. equities, 20% to 30% in international equities, 13% to 16% in fixed income investments, 4% to 6% in real estate, and up to 8% in cash and other investments. The portfolio's equity weighting is consistent with the long-term nature of the plans' benefit obligation, and the expected annual standard deviation of returns of the targeted portfolio, which approximates 13%, reflects this equity allocation. At December 31, 2002, the cash component of the actual investment portfolio was slightly in excess of the targeted allocation. This excess has been subsequently reinvested according to the targeted allocation.

Holding all other assumptions constant, the 2003 net pension and other postretirement benefit cost for the Company's U.S. plans is expected to increase by approximately \$115.0 million, of which approximately \$75.0 million is attributable to the lower discount rate and approximately \$40.0 million is attributable to the lower expected rate of return.

Actuarial assumptions are based upon management's best estimates and judgment. A reasonably possible change of plus (minus) 25 basis points in the discount rate assumption, with other assumptions held constant, would have an estimated \$25.0 million favorable (unfavorable) impact on net pension and postretirement benefit cost. A reasonably possible change of plus (minus) 25 basis points in the expected rate of return assumption, with other assumptions held constant, would have an estimated \$8.0 million favorable (unfavorable) impact on net pension and postretirement benefit cost. The Company does not expect to have a minimum pension funding requirement under the Internal Revenue Code during 2003. The preceding hypothetical changes in the discount rate and expected rate of return assumptions would not impact the Company's funding requirements.

Unrecognized net loss amounts reflect experience differentials primarily relating to differences between expected and actual returns on plan assets as well as the effects of changes in actuarial assumptions. Expected returns are based on a calculated market-related value of assets. Under this methodology, asset gains/losses resulting from actual returns that differ from the Company's expected returns are recognized in the market-related value of assets ratably over a five-year period. Total unrecognized net loss amounts in excess of certain thresholds are amortized into net pension and other postretirement benefit cost over the average remaining service life of employees. Amortization of total unrecognized net losses for the Company's U.S. plans at December 31, 2002 is expected to increase net pension and other postretirement benefit cost by approximately \$96.0 million in 2003, growing to \$124.0 million in 2007.

### *Contingencies and Environmental Liabilities*

#### Merck

The Company is involved in various claims and legal proceedings of a nature considered normal to its business, including product liability, intellectual property and commercial litigation, as well as additional matters such as antitrust actions. The Company records accruals for contingencies when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. For product liability claims, a portion of the overall accrual is actuarially determined and considers such factors as past experience, number of claims reported and estimates of claims incurred but not yet reported. Individually significant contingent losses are accrued when probable and reasonably estimable.

The Company, including Medco Health, is party to a number of antitrust suits, certain of which have been certified as class actions, instituted by most of the nation's retail pharmacies and consumers in several states, alleging conspiracies in restraint of trade and challenging the pricing and/or purchasing practices of the Company and Medco Health, respectively. A significant number of other pharmaceutical companies and wholesalers have also been sued in the same or similar litigation. In 1994, these actions, except for several actions pending in state courts, were consolidated for pretrial purposes in the United States District

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Court for the Northern District of Illinois. In 1996, the Company and several other defendants finalized an agreement to settle the federal class action alleging conspiracy, which represents the single largest group of retail pharmacy claims. Since that time, the Company has entered into other settlements on satisfactory terms. In October 2001, the Judicial Panel on Multi-District Litigation (Panel) determined that consolidated pretrial proceedings in federal district court in Chicago were substantially completed. The Panel ordered that all of the federal antitrust conspiracy cases, several of which have not been settled by the Company, be returned to the federal district courts in which each case was originally filed. The cases were returned to those courts (and many have since been transferred to the federal court in Brooklyn, New York) for further proceedings. The Company has not engaged in any conspiracy and no admission of wrongdoing was made nor was included in any settlement agreements. While it is not feasible to predict the final outcome of the remaining proceedings, in the opinion of the Company, such proceedings should not ultimately result in any liability which would have a material adverse effect on the Company's financial position, results of operations or liquidity.

As previously disclosed, Merck has been advised by the U.S. Department of Justice that it is investigating marketing and selling activities of Merck and other pharmaceutical manufacturers. Merck will be working with the government to respond appropriately to informational requests.

The Company was joined in ongoing litigation alleging manipulation by pharmaceutical manufacturers of Average Wholesale Prices (AWP), which are sometimes used in calculations that determine public and private sector reimbursement levels. In 2002, the Judicial Panel on Multi-District Litigation ordered the transfer and consolidation of all pending federal AWP cases to federal court in Boston, Massachusetts. Plaintiffs filed one consolidated class action complaint which aggregated the claims previously filed in various federal district court actions and also expanded the number of manufacturers to include some which, like Merck, had not been defendants in any prior pending case. The Company's motion to dismiss the case is now pending before the court in Boston. In addition, Merck and thirty other pharmaceutical manufacturers were recently named in a similar complaint filed in federal court in New York, New York by the County of Suffolk. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

In January 2003, the U.S. Department of Justice notified the federal court in New Orleans, Louisiana that it was not going to intervene in a pending Federal False Claims Act case that was filed under seal in December 1999 against the Company. The court issued an order unsealing the complaint, which was filed by a physician in Louisiana, and ordered that the complaint be served. The complaint alleges that Merck's discounting of *Pepcid* in certain Louisiana hospitals led to increases in costs to Medicaid. Merck believes that the complaint is completely without merit and will vigorously defend against it.

A previously reported dispute between Merck and Pharmacia Corporation (Pharmacia) over competing claims to patent rights to the class of compounds that include rofecoxib, the active ingredient in *Vioxx*, has been settled on a worldwide basis by the parties. As a result, the Company will maintain its worldwide exclusive patent rights to *Vioxx*.

A number of federal and state lawsuits, involving individual claims as well as purported class actions, have been filed against the Company with respect to *Vioxx*. Some of the lawsuits also name as defendants Pfizer Inc. and Pharmacia, which market a competing product. The lawsuits include allegations regarding gastrointestinal bleeding and cardiovascular events. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is a party in claims brought under the Consumer Protection Act of 1987 in the United Kingdom which allege that certain children suffer from a variety of conditions as a result of being vaccinated with various bivalent vaccines for measles and rubella or trivalent vaccines for measles, mumps and rubella, including the Company's *M-M-R II*. Other pharmaceutical companies have also been sued. The claimants allege various adverse consequences, including autism, with or without inflammatory bowel disease, epilepsy, diabetes, encephalitis, encephalopathy and chronic fatigue syndrome. Eight lead cases have been selected for a trial scheduled to commence in April 2004: two against Merck, and six against the other companies. The trial of the eight cases is initially limited to issues of causation and defect on the conditions of autistic spectrum disorders, with or without inflammatory bowel disease. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is also a party to individual and class action product liability lawsuits and claims in the United States involving pediatric vaccines (i.e., hepatitis B vaccine and haemophilus influenza type b vaccine) that contained thimerosal, a preservative used in vaccines. Other defendants include vaccine manufacturers who produced pediatric vaccines containing thimerosal as well as manufacturers of thimerosal. In these actions, the plaintiffs allege, among other things, that they have suffered neurological and other injuries as a result of having thimerosal introduced into their developing bodies. The Company has been successful in having many of these cases either dismissed or stayed on the ground that the National Vaccine Injury Compensation Program (NVICP) prohibits any person from filing or maintaining a civil action seeking damages against a vaccine.

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manufacturer for vaccine-related injuries unless a petition is first filed in the United States Court of Federal Claims. A number of similar cases (*M-M-R II* alone and/or thimerosal-containing vaccines) have been filed in the United States Court of Federal Claims under the NVICP. The procedure being used to process these cases contemplates a decision on general causation issues by July 2004. The Company believes that these lawsuits and claims are completely without merit and will vigorously defend against them in the proceedings in which it is a party.

From time to time, generic manufacturers of pharmaceutical products file Abbreviated New Drug Applications (ANDAs) with the FDA seeking to market generic forms of Company products prior to the expiration of relevant patents owned by the Company. Generic pharmaceutical manufacturers have submitted ANDAs to the FDA seeking to market in the U.S. a generic form of *Fosamax* (alendronate) and *Prilosec* (omeprazole) prior to the expiration of the Company's (and AstraZeneca's in the case of *Prilosec*) patents concerning these products. The generic companies' ANDAs include allegations of non-infringement, invalidity and unenforceability of the patents. Generic manufacturers have received FDA approval to market a generic form of *Prilosec*. The Company has filed patent infringement suits in federal court against companies filing ANDAs for generic alendronate, and AstraZeneca and the Company have filed patent infringement suits in federal court against companies filing ANDAs for generic omeprazole. In the case of alendronate, similar patent challenges exist in certain foreign jurisdictions. The Company intends to vigorously defend its patents, which it believes are valid, against infringement by generic companies attempting to market products prior to the expiration dates of such patents. As with any litigation, there can be no assurance of the outcomes, which, if adverse, could result in significantly shortened periods of exclusivity for these products.

A trial in the U.S. with respect to the alendronate daily product concluded in November 2001. In November 2002, a decision was issued by the District Court in Delaware finding the Company's patent valid and infringed. An appeal has been filed by the defendants. A trial in the U.S. involving the alendronate weekly product is scheduled to commence in March 2003. On January 21, 2003, the High Court of Justice for England and Wales held that patents of the Company protecting the alendronate daily and weekly products are invalid in the United Kingdom. The Company is proceeding with an appeal of this decision.

In the case of omeprazole, the trial court in the United States rendered an opinion in October 2002 upholding the validity of the Company's and AstraZeneca's patents covering the stabilized formulation of omeprazole and ruling that one defendant's omeprazole product did not infringe those patents. The other three defendants' products were found to infringe the formulation patents. Appeals have been filed by all parties in the trial. With respect to certain other generic manufacturers' omeprazole products, no trial date has yet been set.

As previously disclosed, the Company has been named as a defendant in a number of purported class action lawsuits and in two shareholder derivative actions, all relating to the Company's revenue recognition practice for retail copayments paid by individuals to whom Medco Health provides pharmaceutical benefits. Five current or former members of management and members of the Board of Directors have also been named as defendants in certain of these lawsuits. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is a party to a number of proceedings brought under the Comprehensive Environmental Response, Compensation and Liability Act, commonly known as Superfund. When a legitimate claim for contribution is asserted, a liability is initially accrued based upon the estimated transaction costs to manage the site. Accruals are adjusted as feasibility studies and related cost assessments of remedial techniques are completed, and as the extent to which other potentially responsible parties (PRPs) who may be jointly and severally liable can be expected to contribute is determined.

The Company is also remediating environmental contamination resulting from past industrial activity at certain of its sites and takes an active role in identifying and providing for these costs. A worldwide survey was initially performed to assess all sites for potential contamination resulting from past industrial activities. Where assessment indicated that physical investigation was warranted, such investigation was performed, providing a better evaluation of the need for remedial action. Where such need was identified, remedial action was then initiated. Estimates of the extent of contamination at each site were initially made at the pre-investigation stage and liabilities for the potential cost of remediation were accrued at that time. As more definitive information became available during the course of investigations and/or remedial efforts at each site, estimates were refined and accruals were adjusted accordingly. These estimates and related accruals continue to be refined annually.

In management's opinion, the liabilities for all environmental matters which are probable and reasonably estimable have been accrued and totaled \$189.7 million and \$217.8 million at December 31, 2002 and December 31, 2001, respectively. These liabilities are undiscounted, do not consider potential recoveries from insurers or other parties and will be paid out over the periods of remediation for the applicable sites, which are expected to occur primarily over the next 15 years. Although it is not possible to predict with certainty the outcome of these matters, or the ultimate costs of remediation, management does not believe that any reasonably possible expenditures that may be incurred in excess of the liabilities accrued should exceed \$100.0 million in the aggregate. Management also does not believe that these expenditures should result in a material adverse effect on the Company's financial position, results of operations, liquidity or capital resources for any year.

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### Medco Health

Recently, the Company and Medco Health agreed to settle, on a class action basis, a series of lawsuits asserting violations of the Employee Retirement Income Security Act (ERISA). The Company, Medco Health and certain plaintiffs' counsel filed the settlement with the federal district court in New York, where plaintiffs from six pharmaceutical benefit plans for which Medco Health is the pharmacy benefit manager had filed cases. The proposed class action settlement has been agreed to by plaintiffs in five of the initial six cases (the "Gruer Cases") filed against Medco Health and the Company. Under the proposed settlement, which the court has not yet preliminarily approved, the Company and Medco Health have agreed to pay \$42.5 million and Medco Health has agreed to change or to continue certain specified business practices for a period of five years. The financial compensation is intended to benefit members of the settlement class, which includes, among others, ERISA plans for which Medco Health administered a pharmacy benefit at any time since December 17, 1994. If the settlement is preliminarily approved, the class member plans will have the opportunity to participate in or opt out of the settlement. The court will also schedule a hearing for the purpose of determining the fairness of the settlement to class members. One of the initial plaintiffs and a group of lawyers that has filed additional ERISA lawsuits against the Company and Medco Health are expected to oppose the settlement. The settlement becomes final only if and when the district court grants final approval and all appeals have been resolved. Medco Health and the Company agreed to the proposed settlement in order to avoid the significant cost and distraction of protracted litigation.

The Gruer Cases, which are similar to claims against other pharmaceutical benefit managers in other pending cases, alleged that Medco Health should be treated as a "fiduciary" under ERISA and that Medco Health had breached a fiduciary duty to the benefit plans. The amended complaints in the Gruer Cases also alleged that the Company and Medco Health violated ERISA by using Medco Health to increase the Company's market share and by entering into certain "prohibited transactions" with each other that favor the Company's products. The plaintiffs demanded that Medco Health and the Company turn over any unlawfully obtained profits to a trust to be set up for the benefit plans. One of the plaintiffs has indicated that it may amend its complaint against Medco Health and others to allege violations of the Sherman Act, the Clayton Act and various states' antitrust laws due to alleged conspiracies to suppress price competition and unlawful combinations allegedly resulting in higher pharmaceutical prices.

Similar complaints against Medco Health and the Company, which also assert claims of breach of fiduciary duty under ERISA, have been filed in six additional actions by plan participants, purportedly on behalf of their plans and, in some of the actions, similarly-situated self-funded plans. Class action status is being sought in one of the actions. The plans themselves, which could decide to opt out of or participate in the proposed settlement discussed above, are not parties to these lawsuits. An amended complaint in one of the actions alleges that various activities of the Company and Medco Health violate federal and state racketeering laws. In addition, a proposed class action complaint against Medco Health and the Company has also been filed by trustees of one benefit plan. The complaints in these actions rely on many of the same theories as the litigation discussed above.

Two lawsuits based on many of the same allegations are also pending against Medco Health in federal court in California and state court in New Jersey. The theory of liability in the former action, in which the Company is also a defendant, is based on a California statute prohibiting unfair business practices. The plaintiff, who purports to sue on behalf of the general public of California, seeks injunctive relief and disgorgement of the revenues that were allegedly improperly received by the Company and Medco Health. The theory of liability in the New Jersey action is based on a New Jersey consumer protection statute. The plaintiff, which purports to represent a class of similarly-situated non-ERISA plans, seeks compensatory and treble damages. The New Jersey court has dismissed the New Jersey action, but it may be re-initiated under certain circumstances.

Medco Health and the Company believe that these cases are completely without merit, Medco Health is not a "fiduciary" within the meaning of ERISA, and neither the Company nor Medco Health has violated ERISA, the California unfair business practices law, or the New Jersey consumer protection law. Medco Health and the Company intend to vigorously defend against the remaining claims.

As previously disclosed, on August 16, 2002, Medco Health received a letter from the Civil Division of the United States Attorney's Office for the Eastern District of Pennsylvania relating to its ongoing investigation of the pharmacy benefit management industry. In the letter, the government provided Medco Health with a preliminary assessment of its investigation and summarized the remedies the government could seek if it could prove violations of the law. From the Company's standpoint, the letter did not raise any significant new issues.

Also in the letter, the government stated that it was preparing to decide whether to intervene in the qui tam (whistleblower) actions pending in the Eastern District of Pennsylvania against Medco Health, which have been previously disclosed. The government's letter specifically stated that it was not issuing a formal demand, an offer to settle, or a settlement recommendation.

Medco Health believes its practices comply with all legal requirements. Medco Health is continuing to engage in a dialogue with the government with respect to this matter.

There are various other legal proceedings, involving the Company or Medco Health, principally product liability and intellectual property suits involving the Company, which are pending. While it is not feasible to predict the outcome of these proceedings, in the opinion of the Company, all such proceedings are





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either adequately covered by insurance or, if not so covered, should not ultimately result in any liability which would have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health. In addition, from time to time, federal or state regulators seek information about practices in the industries in which the Company and Medco Health operate. While it is not feasible to predict the outcome of any requests for information, the Company and Medco Health do not expect such inquiries to have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health.

## Cautionary Factors That May Affect Future Results

This annual report and other written reports and oral statements made from time to time by the Company may contain so-called "forward-looking statements," all of which are subject to risks and uncertainties. One can identify these forward-looking statements by their use of words such as "expects," "plans," "will," "estimates," "forecasts," "projects" and other words of similar meaning. One can also identify them by the fact that they do not relate strictly to historical or current facts. These statements are likely to address the Company's growth strategy, financial results, product approvals and development programs. One must carefully consider any such statement and should understand that many factors could cause actual results to differ from the Company's forward-looking statements. These factors include inaccurate assumptions and a broad variety of other risks and uncertainties, including some that are known and some that are not. No forward-looking statement can be guaranteed and actual future results may vary materially.

The Company does not assume the obligation to update any forward-looking statement. One should carefully evaluate such statements in light of factors described in the Company's filings with the Securities and Exchange Commission, especially on Forms 10-K, 10-Q and 8-K (if any). In Item 1 of the Company's annual report on Form 10-K for the year ended December 31, 2002, which will be filed in March 2003, the Company discusses in more detail various important factors that could cause actual results to differ from expected or historic results. The Company notes these factors for investors as permitted by the Private Securities Litigation Reform Act of 1995. Prior to the filing of the Form 10-K for the year ended December 31, 2002, reference should be made to Item 1 of the Company's annual report on Form 10-K for the year ended December 31, 2001. One should understand that it is not possible to predict or identify all such factors. Consequently, the reader should not consider any such list to be a complete statement of all potential risks or uncertainties.

## Dividends Paid per Common Share

	Year				
	4th Q	3rd Q	2nd Q	1st Q	
<b>2002</b>	<b>\$1.41</b>	<b>\$.36</b>	<b>\$.35</b>	<b>\$.35</b>	<b>\$.35</b>
2001	1.37	.35	.34	.34	.34

## Condensed Interim Financial Data

(\$ in millions except per share amounts)	4th Q	3rd Q	2nd Q	1st Q
<b>2002</b>				
<b>Sales</b>	<b>\$13,918.4</b>	<b>\$12,892.9</b>	<b>\$12,809.7</b>	<b>\$12,169.3</b>
<b>Materials and production costs</b>	<b>8,700.1</b>	<b>8,080.1</b>	<b>8,292.6</b>	<b>7,980.7</b>
<b>Marketing and administrative expenses</b>	<b>1,681.5</b>	<b>1,562.7</b>	<b>1,477.8</b>	<b>1,464.8</b>
<b>Research and development expenses</b>	<b>838.8</b>	<b>676.9</b>	<b>631.2</b>	<b>530.3</b>
<b>Equity income from affiliates</b>	<b>(94.0)</b>	<b>(188.7)</b>	<b>(190.2)</b>	<b>(171.8)</b>
<b>Other (income) expense, net</b>	<b>92.2</b>	<b>70.6</b>	<b>97.3</b>	<b>43.8</b>
<b>Income before taxes</b>	<b>2,699.8</b>	<b>2,691.3</b>	<b>2,501.0</b>	<b>2,321.5</b>
<b>Net income</b>	<b>1,889.8</b>	<b>1,884.0</b>	<b>1,750.7</b>	<b>1,625.0</b>
<b>Basic earnings per common share</b>	<b>\$.84</b>	<b>\$.84</b>	<b>\$.77</b>	<b>\$.72</b>
<b>Earnings per common share assuming dilution</b>	<b>\$.83</b>	<b>\$.83</b>	<b>\$.77</b>	<b>\$.71</b>
<b>2001</b>				
<b>Sales</b>	<b>\$12,558.0</b>	<b>\$11,919.6</b>	<b>\$11,893.1</b>	<b>\$11,345.1</b>
<b>Materials and production costs</b>	<b>7,642.4</b>	<b>7,082.8</b>	<b>7,204.8</b>	<b>7,046.5</b>
<b>Marketing and administrative expenses</b>	<b>1,555.4</b>	<b>1,525.3</b>	<b>1,637.4</b>	<b>1,506.2</b>
<b>Research and development expenses</b>	<b>716.4</b>	<b>590.3</b>	<b>602.4</b>	<b>547.4</b>
<b>Equity income from affiliates</b>	<b>(128.2)</b>	<b>(164.1)</b>	<b>(215.0)</b>	<b>(178.6)</b>
<b>Other (income) expense, net</b>	<b>113.5</b>	<b>102.2</b>	<b>70.0</b>	<b>56.1</b>
<b>Income before taxes</b>	<b>2,658.5</b>	<b>2,783.1</b>	<b>2,593.5</b>	<b>2,367.5</b>
<b>Net income</b>	<b>1,860.9</b>	<b>1,948.2</b>	<b>1,815.4</b>	<b>1,657.3</b>
<b>Basic earnings per common share</b>	<b>\$.82</b>	<b>\$.85</b>	<b>\$.79</b>	<b>\$.72</b>

**Common Stock Market Prices**

	4th Q	3rd Q	2nd Q	1st Q
<b>2002</b>				
<b>High</b>	<b>\$60.48</b>	<b>\$54.00</b>	<b>\$58.85</b>	<b>\$64.50</b>
<b>Low</b>	<b>43.35</b>	<b>38.50</b>	<b>47.60</b>	<b>56.71</b>
<b>2001</b>				
<b>High</b>	<b>\$70.60</b>	<b>\$71.50</b>	<b>\$80.85</b>	<b>\$95.25</b>
<b>Low</b>	<b>56.80</b>	<b>60.35</b>	<b>63.65</b>	<b>66.00</b>

The principal market for trading of the common stock is the New York Stock Exchange under the symbol MRK.

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### Consolidated Statement of Income

Merck & Co., Inc. and Subsidiaries

Years Ended December 31

(\$ in millions except per share amounts)

	2002	2001	2000
Sales	\$ 51,790.3	\$47,715.7	\$40,363.2
Costs, Expenses and Other			
Materials and production	33,053.6	28,976.5	22,443.5
Marketing and administrative	6,186.8	6,224.4	6,167.7
Research and development	2,677.2	2,456.4	2,343.8
Equity income from affiliates	(644.7)	(685.9)	(764.9)
Other (income) expense, net	303.8	341.7	349.0
	41,576.7	37,313.1	30,539.1
Income Before Taxes	10,213.6	10,402.6	9,824.1
Taxes on Income	3,064.1	3,120.8	3,002.4
Net Income	\$ 7,149.5	\$ 7,281.8	\$ 6,821.7
Basic Earnings per Common Share	\$3.17	\$3.18	\$2.96
Earnings per Common Share Assuming Dilution	\$3.14	\$3.14	\$2.90

### Consolidated Statement of Retained Earnings

Merck & Co., Inc. and Subsidiaries

Years Ended December 31

(\$ in millions)

	2002	2001	2000
Balance, January 1	\$31,489.6	\$27,363.9	\$23,447.9
Net Income	7,149.5	7,281.8	6,821.7
Common Stock Dividends Declared	(3,204.2)	(3,156.1)	(2,905.7)
Balance, December 31	\$35,434.9	\$31,489.6	\$27,363.9

### Consolidated Statement of Comprehensive Income

Merck & Co., Inc. and Subsidiaries

Years Ended December 31

(\$ in millions)

	2002	2001	2000
Net Income	\$7,149.5	\$7,281.8	\$6,821.7

Other Comprehensive Income (Loss)			
Net unrealized (loss) gain on derivatives, net of tax and net income realization	(20.0)	7.3	—
Net unrealized gain on investments, net of tax and net income realization	73.1	11.1	24.3
Minimum pension liability, net of tax	(162.5)	(38.6)	(1.6)
	(109.4)	(20.2)	22.7
Comprehensive Income	\$7,040.1	\$7,261.6	\$6,844.4

*The accompanying notes are an integral part of these consolidated financial statements.*

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### Consolidated Balance Sheet

Merck & Co., Inc. and Subsidiaries

December 31

(\$ in millions)

	2002	2001
<b>Assets</b>		
Current Assets		
Cash and cash equivalents	\$ 2,243.0	\$ 2,144.0
Short-term investments	2,728.2	1,142.6
Accounts receivable	5,423.4	5,215.4
Inventories	3,411.8	3,579.3
Prepaid expenses and taxes	1,027.5	880.3
Total current assets	14,833.9	12,961.6
Investments	7,255.1	6,983.5
Property, Plant and Equipment (at cost)		
Land	336.9	315.2
Buildings	7,336.5	6,653.9
Machinery, equipment and office furnishings	10,883.6	9,807.0
Construction in progress	2,426.6	2,180.4
	20,983.6	18,956.5
Less allowance for depreciation	6,788.0	5,853.1
	14,195.6	13,103.4
Goodwill	4,127.0	4,127.0
Other Intangibles, Net	3,114.0	3,364.0
Other Assets	4,035.6	3,481.7
	\$ 47,561.2	\$44,021.2
<b>Liabilities and Stockholders' Equity</b>		
Current Liabilities		
Loans payable and current portion of long-term debt	\$ 3,669.8	\$ 4,066.7
Trade accounts payable	2,413.3	1,895.2
Accrued and other current liabilities	3,365.6	3,213.2
Income taxes payable	2,118.1	1,573.3
Dividends payable	808.4	795.8
Total current liabilities	12,375.2	11,544.2
Long-Term Debt	4,879.0	4,798.6
Deferred Income Taxes and Noncurrent Liabilities	7,178.2	6,790.8
Minority Interests	4,928.3	4,837.5
Stockholders' Equity		
Common stock, one cent par value		
Authorized-5,400,000,000 shares		
Issued-2,976,198,757 shares-2002		
-2,976,129,820 shares-2001	29.8	29.8
Other paid-in capital	6,943.7	6,907.2
Retained earnings	35,434.9	31,489.6
Accumulated other comprehensive (loss) income	(98.8)	10.6

	<b>42,309.6</b>	38,437.2
Less treasury stock, at cost		
731,215,507 shares—2002	<b>24,109.1</b>	22,387.1
703,400,499 shares—2001		
Total stockholders' equity	<b>18,200.5</b>	16,050.1
	<b>\$ 47,561.2</b>	\$44,021.2

*The accompanying notes are an integral part of this consolidated financial statement.*

[Table of Contents](#)**Consolidated Statement of Cash Flows**

Merck &amp; Co., Inc. and Subsidiaries

Years Ended December 31

(\$ in millions)

	2002	2001	2000
<b>Cash Flows from Operating Activities</b>			
Net income	\$ 7,149.5	\$ 7,281.8	\$ 6,821.7
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	1,488.3	1,454.2	1,268.4
Deferred income taxes	444.8	465.9	(94.3)
Other	(100.9)	(59.4)	94.9
Net changes in assets and liabilities:			
Accounts receivable	(89.6)	(9.2)	(885.8)
Inventories	166.4	(557.5)	(210.1)
Trade accounts payable	503.1	351.5	88.5
Accrued and other current liabilities	106.8	117.6	(143.1)
Income taxes payable	486.4	524.7	639.9
Noncurrent liabilities	(338.7)	(454.5)	189.4
Other	(287.4)	(35.2)	(82.2)
<b>Net Cash Provided by Operating Activities</b>	<b>9,528.7</b>	<b>9,079.9</b>	<b>7,687.3</b>
<b>Cash Flows from Investing Activities</b>			
Capital expenditures	(2,369.7)	(2,724.7)	(2,727.8)
Purchase of securities, subsidiaries and other investments	(37,555.0)	(34,780.4)	(28,637.1)
Proceeds from sale of securities, subsidiaries and other investments	35,913.8	33,383.0	27,667.5
Other	(0.1)	(190.2)	56.1
<b>Net Cash Used by Investing Activities</b>	<b>(4,011.0)</b>	<b>(4,312.3)</b>	<b>(3,641.3)</b>
<b>Cash Flows from Financing Activities</b>			
Net change in short-term borrowings	(508.4)	259.8	905.6
Proceeds from issuance of debt	2,618.5	1,694.4	442.1
Payments on debt	(2,504.9)	(11.0)	(443.2)
Proceeds from issuance of preferred units of subsidiary	—	—	1,500.0
Purchase of treasury stock	(2,091.3)	(3,890.8)	(3,545.4)
Dividends paid to stockholders	(3,191.6)	(3,145.0)	(2,798.0)
Proceeds from exercise of stock options	318.3	300.6	640.7
Other	(172.5)	(279.2)	(149.2)
<b>Net Cash Used by Financing Activities</b>	<b>(5,531.9)</b>	<b>(5,071.2)</b>	<b>(3,447.4)</b>
Effect of Exchange Rate Changes on Cash and Cash Equivalents	113.2	(89.2)	(83.7)
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	<b>99.0</b>	<b>(392.8)</b>	<b>514.9</b>
Cash and Cash Equivalents at Beginning of Year	2,144.0	2,536.8	2,021.9
<b>Cash and Cash Equivalents at End of Year</b>	<b>\$ 2,243.0</b>	<b>\$ 2,144.0</b>	<b>\$ 2,536.8</b>

*The accompanying notes are an integral part of this consolidated financial statement.*



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### Notes to Consolidated Financial Statements

Merck & Co., Inc. and Subsidiaries

(\$ in millions except per share amounts)

#### 1. Nature of Operations

Merck is a global research-driven pharmaceutical products and services company that discovers, develops, manufactures and markets a broad range of innovative products to improve human and animal health, directly and through its joint ventures, and provides pharmacy benefit management services through Medco Health Solutions, Inc. (Medco Health). Human health products include therapeutic and preventive agents, generally sold by prescription, for the treatment of human disorders. Pharmacy benefit services primarily include sales of prescription drugs through managed prescription drug programs, as well as services provided through programs to manage patient health and drug utilization.

#### 2. Summary of Accounting Policies

*Principles of Consolidation*—The consolidated financial statements include the accounts of the Company and all of its subsidiaries in which a controlling interest is maintained. Controlling interest is determined by majority ownership interest and the absence of substantive third party participating rights. For those consolidated subsidiaries where Merck ownership is less than 100%, the outside stockholders' interests are shown as Minority interests. Investments in affiliates over which the Company has significant influence but not a controlling interest, such as interests in entities owned equally by the Company and a third party that are under shared control, are carried on the equity basis.

*Foreign Currency Translation*—The U.S. dollar is the functional currency for the Company's foreign subsidiaries.

*Cash and Cash Equivalents*—Cash equivalents are comprised of certain highly liquid investments with original maturities of less than three months.

*Inventories*—Substantially all domestic pharmaceutical inventories are valued at the lower of last-in, first-out (LIFO) cost or market for both book and tax purposes. Medco Health inventory and foreign pharmaceutical inventories are valued at the lower of first-in, first-out (FIFO) cost or market.

*Investments*—Investments classified as available-for-sale are reported at fair value, with unrealized gains or losses, to the extent not hedged, reported net of tax and minority interests, in Accumulated other comprehensive income. Investments in debt securities classified as held-to-maturity, consistent with management's intent, are reported at cost. Impairment losses are charged to Other (income) expense, net, for other-than-temporary declines in fair value. The Company considers available evidence in evaluating potential impairment of its investments, including the duration and extent to which fair value is less than cost and the Company's ability and intent to hold the investment.

*Revenue Recognition*—Revenues from sales of Merck human health products are recognized upon shipment of product. Revenues are recorded net of provisions for rebates, discounts and returns, which are established at the time of sale.

Medco Health revenues consist principally of sales of prescription drugs through managed prescription drug programs, either from its home delivery pharmacies or its networks of contractually affiliated retail pharmacies, and are recognized when those prescriptions are dispensed. Medco Health evaluates client contracts using the indicators of Emerging Issues Task Force Issue No. 99-19, Reporting Gross Revenue as a Principal vs. Net as an Agent, to determine whether it acts as a principal or as an agent in the fulfillment of prescriptions through the retail pharmacy network. Where Medco Health acts as a principal, revenues are recognized on a gross reporting basis at the prescription price (ingredient cost plus dispensing fee) negotiated with clients, including the portion of the price allocated by the client to be settled directly by the member (copayment). This is because Medco Health (a) has separate contractual relationships with clients and with pharmacies, (b) is responsible to validate and most economically manage a claim through its claims adjudication process, (c) commits to set prescription prices for the pharmacy, including instructing the pharmacy as to how that price is to be settled (copayment requirements), (d) manages the overall prescription drug relationship with the patients, and (e) has credit risk for the price due from the client. Where Medco Health adjudicates prescriptions at pharmacies that are under contract directly with the client and there are no financial risks to Medco Health, such revenue is recorded using net reporting as service revenues, at the amount of the administrative fee earned by Medco Health for processing the claim. Rebates, guarantees, and risk-sharing payments paid to clients and other discounts are deducted from revenue as they are earned by the client. Other contractual payments made to clients are generally made upon initiation of contracts as implementation allowances, which may, for example, be designated by clients as funding for their costs to transition their plans to Medco Health or as compensation for certain data or licensing rights granted by the client to Medco Health. Medco Health considers these payments to be an integral part of its pricing of a contract and believes that they represent only a variability in the timing of cash flow that does not change the underlying economics of the contract. Accordingly, these payments are capitalized and amortized as a reduction of revenue on a straight-line basis over the life of the contract where the payments are refundable upon cancellation.



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of the contract or relate to non-cancelable contracts. Amounts capitalized are assessed periodically for recoverability based on the profitability of the contract.

Medco Health revenues also include service revenues consisting principally of administrative fees earned from clients and other non-product related service revenues, including from sales of data to pharmaceutical manufacturers and health care organizations. Administrative fees are earned for services that are comprised of claims processing, eligibility management, benefits management, pharmacy network management and other related customer services and are recognized when the prescription is dispensed. Other non-product related service revenues are recorded by Medco Health when performance occurs and collectibility is assured.

*Depreciation*—Depreciation is provided over the estimated useful lives of the assets, principally using the straight-line method. For tax purposes, accelerated methods are used. The estimated useful lives primarily range from 10 to 50 years for Buildings, and from 3 to 15 years for Machinery, equipment and office furnishings.

*Goodwill and Other Intangibles*—Goodwill represents the excess of acquisition costs over the fair value of net assets of businesses purchased. Effective January 1, 2002, the Company adopted the provisions of Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets (FAS 142), which addresses the recognition and measurement of goodwill and other intangibles subsequent to a business combination. In accordance with FAS 142, goodwill associated with acquisitions subsequent to June 30, 2001 was not amortized. (See Note 3.) Effective January 1, 2002, goodwill existing at June 30, 2001 was not amortized, but rather, assigned to reporting units within the Company's segments and evaluated for impairment on at least an annual basis, using a fair value based test. Had amortization expense for goodwill not been recorded in 2001 and 2000, reported net income would have increased by \$132.5 million (\$.06 for both basic earnings per common share and earnings per common share assuming dilution) and \$129.1 million (\$.06 for basic earnings per common share and \$.05 for earnings per common share assuming dilution), respectively. In 2002, the Company completed its transitional and annual impairment tests and determined that goodwill was not impaired under the provisions of the new guidance.

Other acquired intangibles are recorded at cost and are amortized on a straight-line basis over their estimated useful lives. (See Note 7.) When events or circumstances warrant a review, the Company will assess recoverability from future operations of other intangibles using undiscounted cash flows derived from the lowest appropriate asset groupings, generally the subsidiary level. Impairments are recognized in operating results to the extent that carrying value exceeds fair value, which is determined based on the net present value of estimated future cash flows.

*Stock-Based Compensation*—Employee stock-based compensation is recognized using the intrinsic value method. Generally, employee stock options are granted to purchase shares of Company stock at the fair market value at the time of grant. Accordingly, no compensation expense is recognized for the Company's stock-based compensation plans other than for its employee performance-based awards and options granted to employees of certain equity method investees, the total of which is not significant.

The effect on net income and earnings per common share if the Company had applied the fair value method for recognizing employee stock-based compensation is as follows:

<i>Years Ended December 31</i>	<b>2002</b>	2001	2000
Net income, as reported	<b>\$7,149.5</b>	\$7,281.8	\$6,821.7
Compensation expense, net of tax:			
Reported	<b>1.2</b>	(0.1)	7.8
FAS 123	<b>(487.9)</b>	(400.9)	(367.6)
<b>Pro forma net income</b>	<b>\$6,662.8</b>	\$6,880.8	\$6,461.9
Earnings per common share:			
Basic—as reported	<b>\$3.17</b>	\$3.18	\$2.96
Basic—pro forma	<b>\$2.95</b>	\$3.01	\$2.80
Assuming dilution—as reported	<b>\$3.14</b>	\$3.14	\$2.90
Assuming dilution—pro forma	<b>\$2.93</b>	\$2.96	\$2.75

The average fair value of employee and non-employee director options granted during 2002, 2001 and 2000 was \$17.53, \$25.42 and \$23.28, respectively. This fair value was estimated using the Black-Scholes option-pricing model based on the weighted average market price at grant date of \$61.16 in 2002, \$79.10 in 2001 and \$66.81 in 2000 and the following weighted average assumptions:

<i>Years Ended December 31</i>	<b>2002</b>	2001	2000
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Dividend yield	2.3%	1.7%	1.8%
Risk-free interest rate	4.3%	4.8%	6.5%
Volatility	31%	29%	28%
Expected life (years)	5.7	6.7	6.6

*Use of Estimates*—The consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States (GAAP) and, accordingly, include certain amounts that are based on management’s best estimates and judgments. Estimates are used in determining such items as provisions for rebates, discounts and returns, and income taxes, depreciable and amortizable lives, pension and other postretirement benefit plan assumptions, and amounts recorded for contingencies, environmental liabilities and other reserves. Because of the uncertainty inherent in such estimates, actual results may differ from these estimates. The Company is not aware of reasonably likely events or circumstances which would result in different amounts being reported that would have a material impact on results of operations or financial condition.

*Reclassifications*—Certain reclassifications have been made to prior year amounts to conform with current year presentation.

### 3. Acquisition

In July 2001, the Company completed its acquisition of Rosetta Inpharmatics, Inc. (Rosetta), a leading informational genomics company, in a tax-free reorganization. Rosetta has designed and developed several unique technologies to efficiently analyze

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gene data to predict how medical compounds will interact with different kinds of cells in the body, therefore allowing Merck scientists to more precisely select drug targets and potentially accelerate the development process. The acquisition was accounted for under the purchase method and, accordingly, Rosetta's results of operations have been included with the Company's since the acquisition date. Pro forma information is not provided as the transaction does not have a material impact on the Company's results of operations or financial position.

In accordance with the May 2001 Agreement and Plan of Merger (the Agreement), each share of outstanding Rosetta stock was converted into .2352 shares of Merck stock, resulting in the issuance by the Company of approximately 7.7 million shares of common stock. The aggregate purchase price of the transaction approximated \$633.7 million, including a \$587.1 million common share value, \$33.5 million representing employee stock options valued as of the Agreement date, and \$13.1 million of estimated transaction fees. The allocation of the purchase price resulted in tangible assets of \$188.5 million, consisting primarily of cash and short-term investments; other intangible assets of \$44.1 million; liabilities assumed of \$31.1 million, including deferred tax liabilities of \$16.0 million associated with the other intangible assets; and goodwill totaling \$432.2 million. Other intangibles, which have a weighted average useful life approximating five years in aggregate and by major class, include \$27.3 million of patent rights and \$16.7 million of contractual agreements. In accordance with FAS 142, the goodwill associated with the Rosetta acquisition is not amortized.

#### **4. Joint Ventures and Other Equity Method Affiliates**

In 1982, Merck entered into an agreement with Astra AB (Astra) to develop and market Astra's products under a royalty-bearing license. In 1993, the Company's total sales of Astra products reached a level that triggered the first step in the establishment of a joint venture business carried on by Astra Merck Inc. (AMI), in which Merck and Astra each owned a 50% share. This joint venture, formed in 1994, developed and marketed most of Astra's new prescription medicines in the United States including *Prilosec*, the first of a class of medications known as proton pump inhibitors, which slows the production of acid from the cells of the stomach lining.

In 1998, Merck and Astra completed the restructuring of the ownership and operations of the joint venture whereby the Company acquired Astra's interest in AMI, renamed KBI Inc. (KBI), and contributed KBI's operating assets to a new U.S. limited partnership, Astra Pharmaceuticals L.P. (the Partnership), in exchange for a 1% limited partner interest. Astra contributed the net assets of its wholly owned subsidiary, Astra USA, Inc., to the Partnership in exchange for a 99% general partner interest. The Partnership, renamed AstraZeneca LP (AZLP) upon Astra's 1999 merger with Zeneca Group Plc (the AstraZeneca merger), became the exclusive distributor of the products for which KBI retained rights.

While maintaining a 1% limited partner interest in AZLP, Merck has consent and protective rights intended to preserve its business and economic interests, including restrictions on the power of the general partner to make certain distributions or dispositions. Furthermore, in limited events of default, additional rights will be granted to the Company, including powers to direct the actions of, or remove and replace, the Partnership's chief executive officer and chief financial officer. Merck earns certain Partnership returns as well as ongoing revenue based on sales of current and future KBI products. The Partnership returns include a priority return provided for in the Partnership Agreement, variable returns based, in part, upon sales of certain former Astra USA, Inc. products, and a preferential return representing Merck's share of undistributed AZLP GAAP earnings. These returns, which are recorded as Equity income from affiliates, aggregated \$640.2 million, \$642.8 million and \$637.5 million in 2002, 2001 and 2000, respectively. The AstraZeneca merger triggers a partial redemption of Merck's limited partnership interest in 2008. Upon this redemption, AZLP will distribute to KBI an amount based primarily on a multiple of Merck's annual revenue derived from sales of the former Astra USA, Inc. products for the three years prior to the redemption (the Limited Partner Share of Agreed Value).

In conjunction with the 1998 restructuring, for a payment of \$443.0 million, which was deferred, Astra purchased an option (the Asset Option) to buy Merck's interest in the KBI products, excluding the gastrointestinal medicines *Prilosec* and *Nexium*. The Asset Option is exercisable in 2010 at an exercise price equal to the net present value as of March 31, 2008 of projected future pretax revenue to be received by the Company from the KBI products (the Appraised Value). Merck also has the right to require Astra to purchase such interest in 2008 at the Appraised Value. In addition, the Company granted Astra an option to buy Merck's common stock interest in KBI at an exercise price based on the net present value of estimated future net sales of *Prilosec* and *Nexium*. This option is exercisable two years after Astra's purchase of Merck's interest in the KBI products.

The 1999 AstraZeneca merger constituted a Trigger Event under the KBI restructuring agreements. As a result of the merger, in exchange for Merck's relinquishment of rights to future Astra products with no existing or pending U.S. patents at the time of the merger, Astra paid \$967.4 million (the Advance Payment), which is subject to a true-up calculation in 2008 that may require repayment of all or a portion of this amount. The True-Up Amount is directly dependent on the fair market value in 2008 of the Astra product rights retained by the Company. Accordingly, recognition of this contingent income has been deferred until the realizable amount, if any, is determinable, which is not anticipated prior to 2008.

Under the provisions of the KBI restructuring agreements, because a Trigger Event has occurred, the sum of the Limited Partner Share of Agreed Value, the Appraised Value and the True-Up Amount is guaranteed to be a minimum of \$4.7 billion. Distribution of the Limited Partner Share of Agreed Value and payment of the True-Up Amount will occur in 2008. AstraZeneca's purchase of Merck's interest in the KBI products is contingent upon the exercise of either Merck's option in 2008 or AstraZeneca's option in 2010 and, therefore, payment of the Appraised Value may or may not occur.

In 1989, Merck formed a joint venture with Johnson & Johnson to develop and market a broad range of nonprescription medicines for U.S. consumers. This 50% owned venture was expanded into Europe in 1993, and into Canada in 1996. Sales of product marketed by the joint venture were \$413.0 million for

2002, \$395.0 million for 2001 and \$429.1 million for 2000.

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In 1994, Merck and Pasteur Mérieux Connaught (now Aventis Pasteur) established an equally-owned joint venture to market vaccines in Europe and to collaborate in the development of combination vaccines for distribution in Europe. Joint venture vaccine sales were \$546.4 million for 2002, \$499.6 million for 2001 and \$540.9 million for 2000.

In 1997, Merck and Rhone-Poulenc (now Aventis) combined their animal health and poultry genetics businesses to form Merial Limited (Merial), a fully integrated animal health company, which is a stand-alone joint venture, equally owned by each party. Merial provides a comprehensive range of pharmaceuticals and vaccines to enhance the health, well-being and performance of a wide range of animal species. Merial sales were \$1.7 billion for 2002 and 2001 and \$1.6 billion for 2000.

In May 2000, the Company and Schering-Plough Corporation (Schering-Plough) entered into agreements to create separate equally-owned partnerships to develop and market in the United States new prescription medicines in the cholesterol-management and respiratory therapeutic areas. In December 2001, the cholesterol-management partnership agreements were expanded to include all the countries of the world, excluding Japan. In October 2002, ezetimibe, the first in a new class of cholesterol-lowering agents, was approved in the U.S. as *Zetia* and in Germany as *Ezetrol*. The partnerships are also pursuing the development and marketing of *Zetia* as a once-daily combination tablet with *Zocor*. Sales of ezetimibe totaled \$25.3 million in 2002.

In January 2002, Merck/Schering-Plough Pharmaceuticals reported on results of Phase III clinical trials of a fixed combination tablet containing *Singulair* and *Claritin*, Schering-Plough's non-sedating antihistamine, which did not demonstrate sufficient added benefits in the treatment of seasonal allergic rhinitis.

Investments in affiliates accounted for using the equity method, including the above joint ventures, totaled \$2.2 billion at December 31, 2002 and \$2.0 billion at December 31, 2001. These amounts are reported in Other assets. Dividends and distributions received from these affiliates were \$488.6 million in 2002, \$572.2 million in 2001 and \$475.5 million in 2000.

## 5. Financial Instruments

Upon adoption of Financial Accounting Standards Board Statement No. 133, Accounting for Derivative Instruments and Hedging Activities (FAS 133), on January 1, 2001, the Company recorded a favorable cumulative effect of accounting change of \$45.5 million after tax in Other comprehensive income (loss), representing the mark to fair value of purchased local currency put options. (See Note 17.) The cumulative effect of accounting change recorded in Net income was not significant.

### *Foreign Currency Risk Management*

While the U.S. dollar is the functional currency of the Company's foreign subsidiaries, a significant portion of the Company's revenues are denominated in foreign currencies. Merck relies on sustained cash flows generated from foreign sources to support its long-term commitment to U.S. dollar-based research and development. To the extent the dollar value of cash flows is diminished as a result of a strengthening dollar, the Company's ability to fund research and other dollar-based strategic initiatives at a consistent level may be impaired. The Company has established revenue hedging and balance sheet risk management programs to protect against volatility of future foreign currency cash flows and changes in fair value caused by volatility in foreign exchange rates.

The objective of the revenue hedging program is to reduce the potential for longer-term unfavorable changes in foreign exchange to decrease the U.S. dollar value of future cash flows derived from foreign currency denominated sales, primarily the euro and Japanese yen. To achieve this objective, the Company will partially hedge anticipated third party sales that are expected to occur over its planning cycle, typically no more than three years into the future. The Company will layer in hedges over time, increasing the portion of sales hedged as it gets closer to the expected date of the transaction, such that it is probable that the hedged transaction will occur. The portion of sales hedged is based on assessments of cost-benefit profiles that consider natural offsetting exposures, revenue and exchange rate volatilities and correlations, and the cost of hedging instruments. The hedged anticipated sales are a specified component of a portfolio of similarly denominated foreign currency-based sales transactions, each of which responds to the hedged risk in the same manner. Merck manages its anticipated transaction exposure principally with purchased local currency put options which provide the Company with a right, but not an obligation, to sell foreign currencies in the future at a predetermined price. If the U.S. dollar strengthens relative to the currency of the hedged anticipated sales, total changes in the options' cash flows fully offset the decline in the expected future U.S. dollar cash flows of the hedged foreign currency sales. Conversely, if the U.S. dollar weakens, the options' value reduces to zero, but the Company benefits from the increase in the value of the anticipated foreign currency cash flows.

During the first four months of 2001, changes in the options' intrinsic value were deferred in Accumulated other comprehensive income (AOCI) until recognition of the hedged anticipated revenue. Amounts associated with option time value, which was excluded from the designated hedge relationship and marked to fair value through earnings, were not significant. Effective May 2001, as permitted by FAS 133 implementation guidance finalized in June 2001, the designated hedge relationship is based on total changes in the options' cash flows. Accordingly, the entire fair value change in the options is deferred in AOCI and reclassified into Sales when the hedged anticipated revenue is recognized. The hedge relationship is perfectly effective and therefore no hedge ineffectiveness is recorded. The fair values of purchased currency options are reported in Accounts receivable or Other assets.

The primary objective of the balance sheet risk management program is to protect the U.S. dollar value of foreign currency denominated net monetary assets from the effects of volatility in foreign exchange that might occur prior to their conversion to U.S. dollars. Merck principally utilizes forward exchange contracts which enable the Company to buy and sell foreign currencies in the future at fixed exchange rates and economically offset the consequences of changes in foreign exchange on the amount of U.S. dollar cash flows derived from the net assets. Merck routinely enters into contracts to fully offset the effects of exchange on exposures denominated in developed country currencies, primarily the euro and Japanese yen. For exposures in developing country currencies, the Company will enter into forward contracts on a more limited basis, and



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only when it is deemed economical to do so based on a cost-benefit analysis which considers the magnitude of the exposure and the volatility of the exchange rate. The Company will also minimize the effect of exchange on monetary assets and liabilities by managing operating activities and net asset positions at the local level.

Foreign currency denominated monetary assets and liabilities are remeasured at spot rates in effect on the balance sheet date with the effects of changes in spot rates reported in Other (income) expense, net. The forward contracts are not designated as hedges and are marked to market through Other (income) expense, net. Accordingly, fair value changes in the forward contracts help mitigate the changes in the value of the remeasured assets and liabilities attributable to changes in foreign currency exchange rates, except to the extent of the spot-forward differences. These differences are not significant due to the short-term nature of the contracts, which typically have average maturities at inception of less than one year.

The Company also uses forward contracts to hedge the changes in fair value of certain foreign currency denominated available-for-sale securities attributable to fluctuations in foreign currency exchange rates. Changes in the fair value of the hedged securities due to fluctuations in spot rates are offset in Other (income) expense, net, by the fair value changes in the forward contracts attributable to spot rate fluctuations. Hedge ineffectiveness was not material during 2002 and 2001. Changes in the contracts' fair value due to spot-forward differences are excluded from the designated hedge relationship and recognized in Other (income) expense, net. These amounts were not significant for the years ended December 31, 2002 and 2001.

The fair values of forward exchange contracts are reported in the following four balance sheet line items: Accounts receivable (current portion of gain position), Other assets (non-current portion of gain position), Accrued and other current liabilities (current portion of loss position), or Deferred income taxes and noncurrent liabilities (non-current portion of loss position).

### *Interest Rate Risk Management*

The Company may use interest rate swap contracts on certain investing and borrowing transactions to manage its net exposure to interest rate changes and to reduce its overall cost of borrowing. The Company does not use leveraged swaps and, in general, does not leverage any of its investment activities that would put principal capital at risk.

In 2001, the Company entered into five-year and three-year \$500.0 million notional amount pay-floating, receive-fixed interest rate swap contracts designated as hedges of the fair value changes in \$500.0 million each of five-year and three-year fixed rate notes attributable to changes in the benchmark London Interbank Offered Rate (LIBOR) swap rate. The swaps effectively convert the fixed rate obligations to floating rate instruments. The fair value changes in the notes are fully offset in interest expense by the fair value changes in the swap contracts.

The Company is also a party to a seven-year combined interest rate and currency swap contract entered into in 1997 which converts a variable rate foreign currency denominated investment to a variable rate U.S. dollar investment. In 2000, a portion of this contract was terminated in conjunction with the sale of a portion of the related asset with an immaterial impact on net income. The interest rate component of the swap is not designated as a hedge. The currency swap component is designated as a hedge of the changes in fair value of the investment attributable to exchange. Accordingly, changes in the fair value of the investment due to fluctuations in spot rates are offset in Other (income) expense, net, by fair value changes in the currency swap. Hedge ineffectiveness was not significant during 2002 and 2001. In 2000, a similar five-year swap contract matured and the related asset was sold with an immaterial impact on net income.

In June 2002, Medco Health entered into two swap-based rate lock agreements which hedged the benchmark interest rates associated with its anticipated July 2002 issuances of \$500.0 million each of five-year and ten-year fixed rate notes. The notes were to be issued concurrently or just subsequent to the completion of the proposed initial public offering of Medco Health shares. The swap-based contracts were designated as hedges of the variability in cash flows for the future semiannual interest payments on the anticipated debt offerings due to changes in the LIBOR swap benchmark interest rate during the period prior to the expected issuances. Losses on the contracts upon maturity totaled approximately \$7.0 million. At the end of the second quarter 2002, it was probable that the specific hedged forecasted transactions would not occur within two months of the dates originally specified and, therefore, this amount was charged to Other (income) expense, net.

The fair values of these contracts are reported in Accounts receivable, Other assets, Accrued and other current liabilities, or Deferred income taxes and noncurrent liabilities.

### *Fair Value of Financial Instruments*

Summarized below are the carrying values and fair values of the Company's financial instruments at December 31, 2002 and 2001. Fair values were estimated based on market prices, where available, or dealer quotes.

	2002		2001	
	Carrying Value	Fair Value	Carrying Value	Fair Value
<b>Assets</b>				
Cash and cash equivalents	\$2,243.0	\$2,243.0	\$2,144.0	\$2,144.0
Short-term investments	2,728.2	2,728.2	1,142.6	1,141.7
Long-term investments	7,255.1	7,255.1	6,983.5	6,983.4
Purchased currency options	20.6	20.6	17.6	17.6
Forward exchange contracts and currency swap	48.2	48.2	195.4	195.4
Interest rate swaps	88.3	88.3	11.3	11.3
<b>Liabilities</b>				
Loans payable and current portion of long-term debt	\$3,669.8	\$3,675.6	\$4,066.7	\$4,070.5
Long-term debt	4,879.0	5,194.8	4,798.6	4,860.4
Forward exchange contracts	67.1	67.1	35.9	35.9

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A summary of the carrying values and fair values of the Company's investments at December 31 is as follows:

	2002		2001	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Available-for-sale				
Debt securities	\$9,270.6	\$9,270.6	\$7,308.9	\$7,308.9
Equity securities	601.0	601.0	630.6	630.6
Held-to-maturity securities	111.7	111.7	186.6	185.6

A summary at December 31 of those gross unrealized gains and losses on the Company's available-for-sale investments recorded, net of tax and minority interests, in AOCI is as follows:

	2002		2001	
	Gross Unrealized		Gross Unrealized	
	Gains	Losses	Gains	Losses
Debt securities	\$196.7	\$ (1.7)	\$144.7	\$(19.5)
Equity securities	8.9	(89.8)	32.6	(79.3)

Available-for-sale debt securities and held-to-maturity securities maturing within one year totaled \$2.6 billion and \$103.7 million, respectively, at December 31, 2002. Of the remaining debt securities, \$5.9 billion mature within five years.

At December 31, 2002 and 2001, \$433.5 million and \$575.0 million, respectively, of held-to-maturity securities maturing by 2003 set off \$433.5 million and \$575.0 million, respectively, of 5.0% non-transferable note obligations due by 2003 issued by the Company.

### Concentrations of Credit Risk

As part of its ongoing control procedures, the Company monitors concentrations of credit risk associated with corporate issuers of securities and financial institutions with which it conducts business. Credit risk is minimal as credit exposure limits are established to avoid a concentration with any single issuer or institution. Three drug wholesalers represented, in aggregate, approximately one-fifth of the Company's accounts receivable at December 31, 2002. The Company monitors the creditworthiness of its customers to which it grants credit terms in the normal course of business. Bad debts have been minimal. The Company does not normally require collateral or other security to support credit sales.

## 6. Inventories

Inventories at December 31 consisted of:

	2002	2001
Finished goods	\$1,984.0	\$2,155.7
Raw materials and work in process	1,352.1	1,340.7
Supplies	75.7	82.9
Total (approximates current cost)	3,411.8	3,579.3
Reduction to LIFO cost	—	—
	\$3,411.8	\$3,579.3

Inventories valued under the LIFO method comprised approximately 39% and 41% of inventories at December 31, 2002 and 2001, respectively.

## 7. Other Intangibles

Other intangibles at December 31 consisted of:

	2002	2001
Customer relationships—Medco Health	<b>\$3,172.2</b>	\$3,172.2
Patents and product rights	<b>1,355.2</b>	1,355.2
Other	<b>121.5</b>	122.9
<b>Total acquired cost</b>	<b>\$4,648.9</b>	\$4,650.3
Customer relationships—Medco Health	<b>\$ 757.3</b>	\$ 672.5
Patents and product rights	<b>694.4</b>	545.8
Other	<b>83.2</b>	68.0
<b>Total accumulated amortization</b>	<b>\$1,534.9</b>	\$1,286.3

Aggregate amortization expense, which is recorded in Materials and production expense and Other (income) expense, net, totaled \$248.6 million in 2002, \$241.3 million in 2001, and \$233.8 million in 2000. The estimated aggregate amortization expense for each of the next five years is as follows: 2003, \$245.0 million; 2004, \$239.7 million; 2005, \$210.6 million; 2006, \$189.9 million; and 2007, \$186.9 million.

## 8. Loans Payable, Long-Term Debt and Other Commitments

Loans payable at December 31, 2002 and 2001 consisted primarily of \$2.9 billion and \$3.4 billion, respectively, of commercial paper borrowings and \$500.0 million of notes with annual interest rate resets and a final maturity in 2011. On an annual basis, the notes will either be repurchased from the holders at the option of the remarketing agent and remarketed, or redeemed by the Company. At December 31, 2002 and 2001, loans payable also reflected \$220.4 million and \$113.0 million, respectively, of long-dated notes that are subject to repayment at the option of the holders on an annual basis. The weighted average interest rate for all of these borrowings was 2.0% and 2.5% at December 31, 2002 and 2001, respectively.

Long-term debt at December 31 consisted of:

	2002	2001
6.0% Astra note due 2008	<b>\$1,380.0</b>	\$1,380.0
5.3% notes due 2006	<b>554.1</b>	507.9
4.1% notes due 2005	<b>532.8</b>	501.4
6.8% euronotes due 2005	<b>499.7</b>	499.5
6.4% debentures due 2028	<b>499.1</b>	499.1
6.0% debentures due 2028	<b>496.4</b>	496.3
Variable rate borrowing due 2004	<b>300.0</b>	300.0
6.3% debentures due 2026	<b>247.3</b>	247.2
Other	<b>369.6</b>	367.2
<b>Total</b>	<b>\$4,879.0</b>	\$4,798.6

At December 31, 2002 and 2001, the Company was a party to interest rate swap contracts which effectively convert the 5.3% and 4.1% fixed rate notes to floating rate instruments. (See Note 5.)

Other at December 31, 2002 and 2001 consisted primarily of \$332.6 million of borrowings at variable rates averaging 1.1% and 1.6%, respectively. At December 31, 2002, \$158.7 million and \$106.0 million of these borrowings are subject to repayment at the option of the holders beginning in 2011 and 2010, respectively. In both years, Other also consisted of foreign borrowings at varying rates up to 8.0%.

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The aggregate maturities of long-term debt for each of the next five years are as follows: 2003, \$19.3 million; 2004, \$308.9 million; 2005, \$1.0 billion; 2006, \$564.7 million; 2007, \$7.6 million.

Rental expense under the Company's operating leases, net of sublease income, was \$250.8 million in 2002. The minimum aggregate rental commitments under noncancellable leases are as follows: 2003, \$160.1 million; 2004, \$122.5 million; 2005, \$91.6 million; 2006, \$54.1 million; 2007, \$31.5 million and thereafter, \$54.1 million. The Company has no significant capital leases.

### **9. Contingencies and Environmental Liabilities**

The Company is involved in various claims and legal proceedings of a nature considered normal to its business, including product liability, intellectual property and commercial litigation, as well as additional matters such as antitrust actions. The Company records accruals for such contingencies when it is probable that a liability has been incurred and the amount can be reasonably estimated. These accruals are adjusted periodically as assessments change or additional information becomes available. For product liability claims, a portion of the overall accrual is actuarially determined and considers such factors as past experience, number of claims reported and estimates of claims incurred but not yet reported. Individually significant contingent losses are accrued when probable and reasonably estimable.

The Company, including Medco Health, is party to a number of antitrust suits, certain of which have been certified as class actions, instituted by most of the nation's retail pharmacies and consumers in several states, alleging conspiracies in restraint of trade and challenging the pricing and/or purchasing practices of the Company and Medco Health, respectively. A significant number of other pharmaceutical companies and wholesalers have also been sued in the same or similar litigation. In 1994, these actions, except for several actions pending in state courts, were consolidated for pretrial purposes in the United States District Court for the Northern District of Illinois. In 1996, the Company and several other defendants finalized an agreement to settle the federal class action alleging conspiracy, which represents the single largest group of retail pharmacy claims. Since that time, the Company has entered into other settlements on satisfactory terms. In October 2001, the Judicial Panel on Multi-District Litigation (Panel) determined that consolidated pretrial proceedings in federal district court in Chicago were substantially completed. The Panel ordered that all of the federal antitrust conspiracy cases, several of which have not been settled by the Company, be returned to the federal district courts in which each case was originally filed. The cases were returned to those courts (and many have since been transferred to the federal court in Brooklyn, New York) for further proceedings. The Company has not engaged in any conspiracy and no admission of wrongdoing was made nor was included in any settlement agreements. While it is not feasible to predict the final outcome of the remaining proceedings, in the opinion of the Company, such proceedings should not ultimately result in any liability which would have a material adverse effect on the Company's financial position, results of operations or liquidity.

A number of federal and state lawsuits, involving individual claims as well as purported class actions, have been filed against the Company with respect to *Vioxx*. Some of the lawsuits also name as defendants Pfizer Inc. and Pharmacia Corporation, which market a competing product. The lawsuits include allegations regarding gastrointestinal bleeding and cardiovascular events. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is a party in claims brought under the Consumer Protection Act of 1987 in the United Kingdom which allege that certain children suffer from a variety of conditions as a result of being vaccinated with various bivalent vaccines for measles and rubella or trivalent vaccines for measles, mumps and rubella, including the Company's *M-M-R II*. The Company believes that these lawsuits are completely without merit and will vigorously defend against them.

The Company is a party to a number of proceedings brought under the Comprehensive Environmental Response, Compensation and Liability Act, commonly known as Superfund. When a legitimate claim for contribution is asserted, a liability is initially accrued based upon the estimated transaction costs to manage the site. Accruals are adjusted as feasibility studies and related cost assessments of remedial techniques are completed, and as the extent to which other potentially responsible parties (PRPs) who may be jointly and severally liable can be expected to contribute is determined.

The Company is also remediating environmental contamination resulting from past industrial activity at certain of its sites and takes an active role in identifying and providing for these costs. A worldwide survey was initially performed to assess all sites for potential contamination resulting from past industrial activities. Where assessment indicated that physical investigation was warranted, such investigation was performed, providing a better evaluation of the need for remedial action. Where such need was identified, remedial action was then initiated. Estimates of the extent of contamination at each site were initially made at the pre-investigation stage and liabilities for the potential cost of remediation were accrued at that time. As more definitive information became available during the course of investigations and/or remedial efforts at each site, estimates were refined and accruals were adjusted accordingly. These estimates and related accruals continue to be refined annually.

In management's opinion, the liabilities for all environmental matters which are probable and reasonably estimable have been accrued and totaled \$189.7 million and \$217.8 million at December 31, 2002 and 2001, respectively. These liabilities are undiscounted, do not consider potential recoveries from insurers or other parties and will be paid out over the periods of remediation for the applicable sites, which are expected to occur primarily over the next 15 years. Although it is not possible to predict with certainty the outcome of these matters, or the ultimate costs of remediation, management does not believe that any reasonably

possible expenditures that may be incurred in excess of the liabilities accrued should exceed \$100.0 million in the aggregate. Management also does not believe that these expenditures should result in a material adverse effect on the Company's financial position, results of operations, liquidity or capital resources for any year.

Recently, the Company and Medco Health agreed to settle, on a class action basis, a series of lawsuits asserting violations of the Employee Retirement Income Security Act (ERISA). The Company, Medco Health and certain plaintiffs' counsel filed the

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settlement with the federal district court in New York, where plaintiffs from six pharmaceutical benefit plans for which Medco Health is the pharmacy benefit manager had filed cases. The proposed class action settlement has been agreed to by plaintiffs in five of the initial six cases (the “Gruer Cases”) filed against Medco Health and the Company. Under the proposed settlement, which the court has not yet preliminarily approved, the Company and Medco Health have agreed to pay \$42.5 million and Medco Health has agreed to change or to continue certain specified business practices for a period of five years. The financial compensation is intended to benefit members of the settlement class, which includes, among others, ERISA plans for which Medco Health administered a pharmacy benefit at any time since December 17, 1994. If the settlement is preliminarily approved, the class member plans will have the opportunity to participate in or opt out of the settlement. The court will also schedule a hearing for the purpose of determining the fairness of the settlement to class members. One of the initial plaintiffs and a group of lawyers that has filed additional ERISA lawsuits against the Company and Medco Health are expected to oppose the settlement. The settlement becomes final only if and when the district court grants final approval and all appeals have been resolved. Medco Health and the Company agreed to the proposed settlement in order to avoid the significant cost and distraction of protracted litigation.

The Gruer Cases, which are similar to claims against other pharmaceutical benefit managers in other pending cases, alleged that Medco Health should be treated as a “fiduciary” under ERISA and that Medco Health had breached a fiduciary duty to the benefit plans. The amended complaints in the Gruer Cases also alleged that the Company and Medco Health violated ERISA by using Medco Health to increase the Company’s market share and by entering into certain “prohibited transactions” with each other that favor the Company’s products. The plaintiffs demanded that Medco Health and the Company turn over any unlawfully obtained profits to a trust to be set up for the benefit plans. One of the plaintiffs has indicated that it may amend its complaint against Medco Health and others to allege violations of the Sherman Act, the Clayton Act and various states’ antitrust laws due to alleged conspiracies to suppress price competition and unlawful combinations allegedly resulting in higher pharmaceutical prices.

Similar complaints against Medco Health and the Company, which also assert claims of breach of fiduciary duty under ERISA, have been filed in six additional actions by plan participants, purportedly on behalf of their plans and, in some of the actions, similarly-situated self-funded plans. Class action status is being sought in one of the actions. The plans themselves, which could decide to opt out of or participate in the proposed settlement discussed above, are not parties to these lawsuits. An amended complaint in one of the actions alleges that various activities of the Company and Medco Health violate federal and state racketeering laws. In addition, a proposed class action complaint against Medco Health and the Company has also been filed by trustees of one benefit plan. The complaints in these actions rely on many of the same theories as the litigation discussed above.

Two lawsuits based on many of the same allegations are also pending against Medco Health in federal court in California and state court in New Jersey. The theory of liability in the former action, in which the Company is also a defendant, is based on a California statute prohibiting unfair business practices. The plaintiff, who purports to sue on behalf of the general public of California, seeks injunctive relief and disgorgement of the revenues that were allegedly improperly received by the Company and Medco Health. The theory of liability in the New Jersey action is based on a New Jersey consumer protection statute. The plaintiff, which purports to represent a class of similarly-situated non-ERISA plans, seeks compensatory and treble damages. The New Jersey court has dismissed the New Jersey action, but it may be re-initiated under certain circumstances.

Medco Health and the Company believe that these cases are completely without merit, Medco Health is not a “fiduciary” within the meaning of ERISA, and neither the Company nor Medco Health has violated ERISA, the California unfair business practices law, or the New Jersey consumer protection law. Medco Health and the Company intend to vigorously defend against the remaining claims.

There are various other legal proceedings, involving the Company or Medco Health, principally product liability and intellectual property suits involving the Company, which are pending. While it is not feasible to predict the outcome of these proceedings, in the opinion of the Company, all such proceedings are either adequately covered by insurance or, if not so covered, should not ultimately result in any liability which would have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health. In addition, from time to time, federal or state regulators seek information about practices in the industries in which the Company and Medco Health operate. While it is not feasible to predict the outcome of any requests for information, the Company and Medco Health do not expect such inquiries to have a material adverse effect on the financial position, liquidity or results of operations of the Company or Medco Health.

## **10. Preferred Stock of Subsidiary Companies**

In March 2000, a wholly-owned subsidiary of the Company issued \$1.5 billion par value of variable rate preferred units. The units are redeemable at par value plus accrued dividends at the option of the issuer at any time. They are also redeemable at the option of the holders in March 2010, and at the end of each five-year interval thereafter. In addition, certain provisions could lead the Company’s subsidiary to decide to redeem the preferred units if the credit ratings on the Company’s unsecured senior debt obligations fall below specified levels, the likelihood of which the Company believes is remote. Because the preferred securities are held at the subsidiary level, they are included in Minority interests in the consolidated financial statements.

In connection with the 1998 restructuring of AMI (see Note 4), the Company assumed a \$2.4 billion par value preferred stock obligation with a dividend rate of 5% per annum which is carried by KBI and included in Minority interests. While a small portion of the preferred stock carried by KBI is convertible into KBI common shares, none of the preferred securities are convertible into the Company’s common shares and, therefore, they are not included as common shares issuable for purposes of computing Earnings per common share assuming dilution. (See Note 16.)



## 11. Stockholders' Equity

Other paid-in capital increased by \$36.5 million, \$641.4 million and \$345.3 million in 2002, 2001 and 2000, respectively. The

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increase in 2001 includes \$615.3 million resulting from shares issued and equivalent employee stock options assumed in connection with the Rosetta acquisition. (See Note 3.) The remaining increases primarily reflect the impact of shares issued upon exercise of stock options and related income tax benefits.

A summary of treasury stock transactions (shares in millions) is as follows:

	2002		2001		2000	
	Shares	Cost	Shares	Cost	Shares	Cost
Balance, Jan. 1	703.4	\$22,387.1	660.8	\$18,857.8	638.9	\$16,164.6
Purchases	39.2	2,091.3	54.5	3,890.8	52.5	3,545.4
Issuances <sup>(1)</sup>	(11.4)	(369.3)	(11.9)	(361.5)	(30.6)	(852.2)
Balance, Dec. 31	731.2	\$24,109.1	703.4	\$22,387.1	660.8	\$18,857.8

<sup>(1)</sup> Issued primarily under stock option plans.

At December 31, 2002 and 2001, 10 million shares of preferred stock, without par value, were authorized; none were issued.

## 12. Stock Option Plans

The Company has stock option plans under which employees, non-employee directors and employees of certain of the Company's equity method investees may be granted options to purchase shares of Company common stock at the fair market value at the time of the grant. These plans were approved by the Company's shareholders. Option grants beginning in 2002 generally vest ratably over three years, while grants prior to 2002 generally vest after five years. The options expire ten years from the date of grant. The Company's stock option plan for employees also provides for the granting of performance-based stock awards. In connection with Merck's acquisition of Rosetta in 2001 and Medco Health's 2000 acquisition of ProVantage Health Services, Inc., stock options outstanding on the acquisition dates were converted into options to purchase shares of Company common stock with equivalent value.

Summarized information relative to the Company's stock option plans (shares in thousands) is as follows:

	Number of Shares	Average Price <sup>(1)</sup>
Outstanding at December 31, 1999	178,692.6	\$42.92
Granted	32,947.5	66.97
Exercised	(30,638.4)	20.91
Forfeited	(4,774.7)	61.80
Equivalent options assumed	149.7	78.94
Outstanding at December 31, 2000	176,376.7	50.75
Granted	36,767.6	79.12
Exercised	(11,604.4)	25.90
Forfeited	(5,021.0)	68.78
Equivalent options assumed	681.8	30.78
Outstanding at December 31, 2001	197,200.7	56.98
Granted	37,809.4	61.18
Exercised	(11,048.3)	28.82
Forfeited	(5,852.5)	69.20
<b>Outstanding at December 31, 2002</b>	<b>218,109.3</b>	<b>\$58.80</b>

<sup>(1)</sup> Weighted average exercise price.

The number of shares and average price of options exercisable at December 31, 2002, 2001 and 2000 were 70.7 million shares at \$35.97, 55.1 million shares at \$27.09 and 42.5 million shares at \$21.56, respectively. At December 31, 2002 and 2001, 46.0 million shares and 87.6 million shares, respectively, were available for future grants under the terms of these plans.

Summarized information about stock options outstanding and exercisable at December 31, 2002 (shares in thousands) is as follows:

Exercise Price Range	Outstanding			Exercisable	
	Number of Shares	Average Life(1)	Average Price(2)	Number of Shares	Average Price(2)
Under \$15	3,999.3	5.03	\$ 12.93	3,999.3	\$12.93
\$15 to 25	21,854.8	1.64	18.66	21,787.7	18.65
\$25 to 40	15,900.1	3.20	32.78	15,688.3	32.74
\$40 to 50	21,929.7	4.34	48.66	20,870.3	48.70
\$50 to 65	65,187.5	7.18	61.99	3,901.8	55.68
\$65 to 80	63,239.2	7.34	72.94	3,234.8	72.82
Over \$80	25,998.7	6.05	81.71	1,175.6	85.41
	<b>218,109.3</b>			<b>70,657.8</b>	

(1) Weighted average contractual life remaining in years.

(2) Weighted average exercise price.

### 13. Pension and Other Postretirement Benefit Plans

The net cost for the Company's pension plans consisted of the following components:

Years Ended December 31	2002	2001	2000
Service cost	\$ 233.5	\$ 190.4	\$ 171.2
Interest cost	234.3	217.4	199.7
Expected return on plan assets	(320.0)	(287.9)	(266.6)
Net amortization	49.8	27.9	11.5
<b>Net pension cost</b>	<b>\$ 197.6</b>	<b>\$ 147.8</b>	<b>\$ 115.8</b>

The net pension cost attributable to international plans included in the above table was \$75.5 million in 2002, \$67.3 million in 2001 and \$73.3 million in 2000.

The net cost of postretirement benefits other than pensions consisted of the following components:

Years Ended December 31	2002	2001	2000
Service cost	\$ 58.9	\$ 52.7	\$ 36.5
Interest cost	76.1	77.4	62.0
Expected return on plan assets	(78.6)	(84.6)	(94.5)
Net amortization	(9.1)	(11.4)	(29.5)
Curtailment	(54.2)	—	—
<b>Net postretirement benefit cost</b>	<b>\$ (6.9)</b>	<b>\$ 34.1</b>	<b>\$(25.5)</b>

The cost of health care and life insurance benefits for active employees was \$343.6 million in 2002, \$307.2 million in 2001 and \$263.0 million in 2000.



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Summarized information about the changes in plan assets and benefit obligation is as follows:

	Pension Benefits		Other Postretirement Benefits	
	2002	2001	2002	2001
Fair value of plan assets at January 1	\$2,864.5	\$3,121.3	\$ 796.9	\$ 861.3
Actual return on plan assets	(244.5)	(258.1)	(113.3)	(56.5)
Company contributions	761.3	250.2	—	—
Benefits paid from plan assets	(273.4)	(255.0)	(4.8)	(7.9)
Other	(2.5)	6.1	—	—
Fair value of plan assets at December 31	\$3,105.4	\$2,864.5	\$ 678.8	\$ 796.9
Benefit obligation at January 1	\$3,611.8	\$3,166.8	\$1,154.6	\$ 909.8
Service cost	233.5	190.4	58.9	52.7
Interest cost	234.3	217.4	76.1	77.4
Actuarial losses	628.9	283.0	230.9	177.1
Benefits paid	(292.6)	(272.5)	(56.1)	(50.9)
Plan amendments	9.2	26.6	(134.8)	(11.5)
Other	(15.0)	0.1	—	—
Benefit obligation at December 31	\$4,410.1	\$3,611.8	\$1,329.6	\$1,154.6

The fair value of international pension plan assets included in the preceding table was \$1.1 billion in 2002 and \$879.7 million in 2001. The pension benefit obligation of international plans included in this table was \$1.4 billion in 2002 and \$1.2 billion in 2001.

A reconciliation of the plans' funded status to the net asset (liability) recognized at December 31 is as follows:

	Pension Benefits		Other Postretirement Benefits	
	2002	2001	2002	2001
Plan assets less than benefit obligation	\$(1,304.7)	\$(747.3)	\$(650.8)	\$(357.7)
Unrecognized net loss	2,498.0	1,331.2	630.9	215.6
Unrecognized plan changes	84.4	84.4	(165.2)	(100.7)
Unrecognized transitional net asset	—	(6.3)	—	—
Net asset (liability)	\$ 1,277.7	\$ 662.0	\$(185.1)	\$(242.8)
Recognized as:				
Other assets	\$ 1,154.6	\$ 853.2	\$ —	\$ —
Accrued and other current liabilities	(20.0)	(17.1)	(24.9)	(24.9)
Deferred income taxes and noncurrent liabilities	(373.7)	(412.2)	(160.2)	(217.9)
Accumulated other comprehensive loss	516.8	238.1	—	—

For pension plans with benefit obligations in excess of plan assets at December 31, 2002 and 2001, the fair value of plan assets was \$3.0 billion and \$2.3 billion, respectively, and the benefit obligation was \$4.3 billion and \$3.1 billion, respectively. For those plans with accumulated benefit obligations in excess of plan assets at December 31, 2002 and 2001, the fair value of plan assets was \$849.9 million and \$387.7 million, respectively, and the accumulated benefit obligation was \$1.1 billion and \$697.6 million, respectively.

Assumptions used in determining U.S. plan information are as follows:

<i>December 31</i>	Pension and Other Postretirement Benefits		
	2002	2001	2000
Discount rate	<b>6.50%</b>	7.25%	7.50%
Expected rate of return on plan assets	<b>10.0</b>	10.0	10.0
Salary growth rate	<b>4.5</b>	4.5	4.5

The Company reassesses its benefit plan assumptions on a regular basis. For 2003, the Company has changed its expected rate of return from 10.0% to 8.75%. Holding all other assumptions constant, the 2003 net pension and other postretirement benefit cost for the Company's U.S. plans is expected to increase by approximately \$115.0 million, of which approximately \$75.0 million is attributable to the lower discount rate at December 31, 2002 and \$40.0 million is attributable to the lower expected rate of return.

For the three years presented, international pension plan assumptions ranged from 2.0% to 8.0% for the discount rate, 5.5% to 9.0% for the expected rate of return on plan assets and 2.0% to 5.0% for the salary growth rate.

Unrecognized net loss amounts reflect experience differentials primarily relating to differences between expected and actual returns on plan assets as well as the effects of changes in actuarial assumptions. Unrecognized net loss amounts in excess of certain thresholds are amortized into net pension and other postretirement benefit cost over the average remaining service life of employees. Amortization of unrecognized net losses for the Company's U.S. plans at December 31, 2002 is expected to increase net pension and other postretirement benefit cost by approximately \$96.0 million in 2003, growing to \$124.0 million in 2007.

At December 31, 2002 and 2001, the Company had a minimum pension liability of \$566.3 million and \$239.5 million, respectively, representing the extent to which the accumulated benefit obligation exceeded plan assets for certain of the Company's pension plans. The increase in the minimum pension liability in 2002, recorded through Other comprehensive income (loss) and Other assets, primarily reflects the increase in the benefit obligation attributable to the reduction in the discount rate assumption as well as, for certain plans, a decrease in the fair value of plan assets.

The health care cost trend rate for other postretirement benefit plans was 11.0% at December 31, 2002. The rate is expected to decline to 5.0% over an eight-year period. A one percentage point change in the health care cost trend rate would have had the following effects:

	One Percentage Point	
	Increase	Decrease
<b>Effect on total service and interest cost components</b>	<b>\$ 27.2</b>	<b>\$ (22.4)</b>
<b>Effect on benefit obligation</b>	<b>206.6</b>	<b>(180.9)</b>

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In 2002, the Company changed participant contributions, eligibility requirements and attribution methodology for certain of its other postretirement benefit plans. These amendments reduced the benefit obligation by \$134.8 million and generated a curtailment gain of \$54.2 million.

### 14. Other (Income) Expense, Net

<i>Years Ended December 31</i>	<b>2002</b>	2001	2000
Interest income	<b>\$(419.3)</b>	\$(490.1)	\$(470.6)
Interest expense	<b>390.8</b>	464.7	484.4
Exchange gains	<b>(7.8)</b>	(3.5)	(34.4)
Minority interests	<b>214.2</b>	290.6	308.7
Amortization of goodwill and other intangibles	<b>204.9</b>	330.1	319.1
Other, net	<b>(79.0)</b>	(250.1)	(258.2)
	<b>\$ 303.8</b>	\$ 341.7	\$ 349.0

Minority interests include third parties' share of exchange gains and losses arising from translation of the financial statements into U.S. dollars. Reduced minority interests in 2002 reflect lower dividends on variable rate preferred units (see Note 10) and decreased minority interest expense associated with Banyu Pharmaceutical Co., Ltd. (Banyu). In January 2003, the Company, through its wholly owned subsidiary, MSD (Japan) Co., Ltd., launched a tender offer to acquire, for an estimated aggregate purchase price of \$1.5 billion, the remaining 49% of the common shares of Banyu that it does not already own. The tender offer, which closes in March 2003, is conditional on the Company receiving at least 76.45 million common shares to bring its share ownership of Banyu to approximately 80% or more.

Decreased amortization of goodwill and other intangibles in 2002 reflects the adoption of FAS 142. (See Note 2.)

Interest paid was \$401.7 million in 2002, \$467.3 million in 2001 and \$450.5 million in 2000.

### 15. Taxes on Income

A reconciliation between the Company's effective tax rate and the U.S. statutory rate is as follows:

	<b>2002</b>	Tax Rate		
	<b>Amount</b>	<b>2002</b>	2001	2000
U.S. statutory rate applied to pretax income	<b>\$3,574.7</b>	<b>35.0 %</b>	35.0 %	35.0 %
Differential arising from:				
Foreign earnings	<b>(602.3)</b>	<b>(5.9)</b>	(5.1)	(4.7)
Tax exemption for Puerto Rico operations	<b>(86.8)</b>	<b>(0.9)</b>	(0.9)	(1.1)
State taxes	<b>220.8</b>	<b>2.2</b>	2.2	1.7
Other	<b>(42.3)</b>	<b>(0.4)</b>	(1.2)	(0.3)
	<b>\$3,064.1</b>	<b>30.0 %</b>	30.0 %	30.6 %

Domestic companies contributed approximately 50% in 2002, 52% in 2001 and 54% in 2000 to consolidated pretax income.

Taxes on income consisted of:

<i>Years Ended December 31</i>	<b>2002</b>	2001	2000
--------------------------------	-------------	------	------

<b>Current provision</b>			
Federal	<b>\$1,691.6</b>	\$1,692.4	\$2,239.0
Foreign	<b>609.3</b>	635.7	591.0
State	<b>318.4</b>	326.8	266.7
	<b>2,619.3</b>	2,654.9	3,096.7
<b>Deferred provision</b>			
Federal	<b>409.8</b>	332.3	(64.4)
Foreign	<b>(8.0)</b>	57.9	(34.9)
State	<b>43.0</b>	75.7	5.0
	<b>444.8</b>	465.9	(94.3)
	<b>\$3,064.1</b>	\$3,120.8	\$3,002.4

Deferred income taxes at December 31 consisted of:

	2002		2001	
	Assets	Liabilities	Assets	Liabilities
Other intangibles	\$ 108.7	\$1,189.0	\$ 133.0	\$1,263.2
Inventory related	700.5	354.1	594.1	300.9
Accelerated depreciation	—	1,459.3	—	1,230.8
Advance payment	338.6	—	338.6	—
Equity investments	57.8	443.2	57.8	408.0
Pensions and OPEB	109.5	291.6	165.0	240.4
Accrued rebates	187.7	—	199.2	—
Compensation related	131.2	—	138.1	—
Environmental related	74.6	—	85.3	—
Other	1,299.9	441.5	1,256.0	382.8
Subtotal	3,008.5	4,178.7	2,967.1	3,826.1
Valuation allowance	(2.4)	—	(2.1)	—
Total deferred taxes	\$3,006.1	\$4,178.7	\$2,965.0	\$3,826.1
Net deferred tax liabilities		\$1,172.6		\$ 861.1
Recognized as:				
Prepaid expenses and taxes		\$ (764.1)		\$ (613.7)
Other assets		(33.3)		(65.2)
Income taxes payable		98.7		12.9
Deferred income taxes and noncurrent liabilities		1,871.3		1,527.1

Income taxes paid in 2002, 2001 and 2000 were \$2.0 billion, \$2.3 billion and \$2.2 billion, respectively. Stock option exercises reduced income taxes paid in 2002, 2001 and 2000 by \$82.5 million, \$153.0 million and \$537.5 million, respectively.

At December 31, 2002, foreign earnings of \$15.0 billion and domestic earnings of \$880.9 million have been retained indefinitely by subsidiary companies for reinvestment. No provision is made for income taxes that would be payable upon the distribution of such earnings, and it is not practicable to determine the amount of the related unrecognized deferred income tax liability. These earnings include income from manufacturing operations in Ireland, which were tax-exempt through 1990 and are taxed at 10% thereafter. In addition, the Company has domestic subsidiaries operating in Puerto Rico under a tax incentive grant that expires in 2016.



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The Company's federal income tax returns have been audited through 1992.

### 16. Earnings per Share

The weighted average common shares used in the computations of basic earnings per common share and earnings per common share assuming dilution (shares in millions) are as follows:

<i>Years Ended December 31</i>	<b>2002</b>	2001	2000
Average common shares outstanding	<b>2,257.5</b>	2,288.3	2,306.9
Common shares issuable <sup>(1)</sup>	<b>19.5</b>	34.0	46.3
Average common shares outstanding assuming dilution	<b>2,277.0</b>	2,322.3	2,353.2

<sup>(1)</sup> Issuable primarily under stock option plans.

### 17. Comprehensive Income

Upon the adoption of FAS 133 on January 1, 2001, the Company recorded a favorable cumulative effect of accounting change of \$45.5 million in Other comprehensive income (loss). This amount represented the mark to fair value of purchased local currency put options maturing throughout 2001 which hedged anticipated foreign currency denominated sales over that same period. At December 31, 2002, \$12.6 million of deferred loss is associated with options maturing in the next 12 months which hedge anticipated foreign currency denominated sales over that same period.

The components of Other comprehensive income (loss) are as follows:

	Pretax <sup>(1)</sup>	Tax	After Tax
<i>Year Ended December 31, 2002</i>			
<b>Net unrealized loss on derivatives</b>	<b>\$ (31.8)</b>	<b>\$ 13.0</b>	<b>\$ (18.8)</b>
<b>Net income realization</b>	<b>(2.0)</b>	<b>0.8</b>	<b>(1.2)</b>
<b>Derivatives</b>	<b>(33.8)</b>	<b>13.8</b>	<b>(20.0)</b>
<b>Net unrealized gain on investments</b>	<b>128.6</b>	<b>24.5</b>	<b>153.1</b>
<b>Net income realization</b>	<b>(86.6)</b>	<b>6.6</b>	<b>(80.0)</b>
<b>Investments</b>	<b>42.0</b>	<b>31.1</b>	<b>73.1</b>
<b>Minimum pension liability</b>	<b>(263.2)</b>	<b>100.7</b>	<b>(162.5)</b>
	<b>\$(255.0)</b>	<b>\$145.6</b>	<b>\$(109.4)</b>
<i>Year Ended December 31, 2001</i>			
Cumulative effect of accounting change	\$ 76.9	\$(31.4)	\$ 45.5
Net unrealized gain on derivatives	49.7	(20.3)	29.4
Net income realization	(114.3)	46.7	(67.6)
Derivatives	12.3	(5.0)	7.3
Net unrealized gain on investments	44.7	35.3	80.0
Net income realization	(73.7)	4.8	(68.9)
Investments	(29.0)	40.1	11.1

Minimum pension liability	(87.1)	48.5	(38.6)
	<b>\$(103.8)</b>	<b>\$ 83.6</b>	<b>\$ (20.2)</b>
<i>Year Ended December 31, 2000</i>			
Net unrealized gain on investments	\$ 0.7	\$ 28.5	\$ 29.2
Net income realization	(1.4)	(3.5)	(4.9)
Investments	(0.7)	25.0	24.3
Minimum pension liability	5.3	(6.9)	(1.6)
	<b>\$ 4.6</b>	<b>\$ 18.1</b>	<b>\$ 22.7</b>

<sup>(1)</sup> *Net of applicable minority interest.*

The components of Accumulated other comprehensive (loss) income are as follows:

<i>December 31</i>	<b>2002</b>	2001
Net unrealized (loss) gain on derivatives	<b>\$ (12.7)</b>	\$ 7.3
Net unrealized gain on investments	<b>156.4</b>	83.3
Minimum pension liability	<b>(242.5)</b>	(80.0)
	<b>\$ (98.8)</b>	\$ 10.6

## 18. Segment Reporting

The Company's operations are principally managed on a products and services basis and are comprised of two reportable segments: Merck Pharmaceutical, which includes products marketed either directly or through joint ventures, and Medco Health. Merck Pharmaceutical products consist of therapeutic and preventive agents, sold by prescription, for the treatment of human disorders. Merck sells these human health products primarily to drug wholesalers and retailers, hospitals, government agencies and managed health care providers such as health maintenance organizations and other institutions.

Medco Health revenues consist principally of sales of prescription drugs through managed prescription drug programs, either from its home delivery pharmacies or its network of contractually affiliated retail pharmacies, as well as services provided through programs to help its clients control the cost and enhance the quality of the prescription drug benefits offered to their members. Medco Health's clients include Blue Cross/Blue Shield plans; managed care organizations; insurance carriers; third-party benefit plan administrators; employers; federal, state and local government agencies; and union-sponsored benefit plans. In 2002 and 2001, Medco Health had one client which represented approximately 16% of Medco Health net revenues. Medco Health revenues in the following table reflect sales of prescription drugs on a drug spend basis, including amounts not reportable as revenues in the Consolidated Statement of Income, in accordance with the Company's internal management reporting presented to the chief operating decision maker.

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All Other includes non-reportable human and animal health segments. Revenues and profits for these segments are as follows:

	Merck Pharmaceutical	Medco Health	All Other	Total
<i>Year Ended December 31, 2002</i>				
Segment revenues	\$ 20,130.0	\$33,433.5	\$1,244.5	\$54,808.0
Segment profits	12,722.8	741.1	1,110.8	14,574.7
Included in segment profits:				
Equity income (loss) from affiliates	205.4	(5.2)	217.6	417.8
Depreciation and amortization	(171.1)	(174.0)	(3.9)	(349.0)
<i>Year Ended December 31, 2001</i>				
Segment revenues	\$ 19,731.5	\$29,693.4	\$1,265.9	\$50,690.8
Segment profits	12,199.9	731.4	977.5	13,908.8
Included in segment profits:				
Equity income (loss) from affiliates	203.2	(3.0)	190.7	390.9
Depreciation and amortization	(160.9)	(141.6)	(3.7)	(306.2)
<i>Year Ended December 31, 2000</i>				
Segment revenues	\$ 18,577.3	\$23,319.6	\$1,211.6	\$43,108.5
Segment profits	11,563.6	683.0	924.8	13,171.4
Included in segment profits:				
Equity income (loss) from affiliates	307.1	—	188.4	495.5
Depreciation and amortization	(136.1)	(107.1)	(3.1)	(246.3)

Segment profits are comprised of segment revenues less certain elements of materials and production costs and operating expenses, including components of equity income (loss) from affiliates and depreciation and amortization expenses. For internal management reporting presented to the chief operating decision maker, the Company does not allocate the vast majority of indirect production costs, research and development expenses and general and administrative expenses, all predominantly related to the Merck pharmaceutical business, as well as the cost of financing these activities. Separate divisions maintain responsibility for monitoring and managing these costs, including depreciation related to fixed assets utilized by these divisions and, therefore, they are not included in the marketing segment profits. The vast majority of goodwill amortization in 2001 and 2000, and other intangibles amortization, predominantly related to the Medco Health business, as well as the cost of financing capital employed, also are not allocated for internal management reporting and, therefore, are not included in the marketing segment profits.

A reconciliation of total segment revenues to consolidated sales is as follows:

<i>Years Ended December 31</i>	2002	2001	2000
Segment revenues	\$54,808.0	\$50,690.8	\$43,108.5
Other revenues	256.8	349.6	434.0
Adjustments	(3,274.5)	(3,324.7)	(3,179.3)
	\$51,790.3	\$47,715.7	\$40,363.2

Other revenues are primarily comprised of miscellaneous corporate revenues, sales related to divested products or businesses and other supply sales. Adjustments represent the elimination of receipts reported as revenues for internal management reporting which are not reportable as revenues under GAAP.

Consolidated sales included \$43.5 billion, \$39.9 billion and \$33.0 billion of revenues derived from the United States and \$8.3 billion, \$7.8 billion and \$7.4 billion of revenues derived from foreign operations in 2002, 2001 and 2000, respectively.

A reconciliation of total segment profits to consolidated income before taxes is as follows:

<i>Years Ended December 31</i>	2002	2001	2000
Segment profits	<b>\$14,574.7</b>	\$13,908.8	\$13,171.4
Other profits	<b>199.4</b>	267.7	339.1
Adjustments	<b>403.3</b>	395.3	545.5
Unallocated:			
Interest income	<b>419.3</b>	490.1	470.6
Interest expense	<b>(390.8)</b>	(464.7)	(484.4)
Equity income (loss) from affiliates	<b>226.9</b>	295.0	269.4
Depreciation and amortization	<b>(1,139.3)</b>	(1,148.0)	(1,022.1)
Research and development	<b>(2,677.2)</b>	(2,456.4)	(2,343.8)
Other expenses, net	<b>(1,402.7)</b>	(885.2)	(1,121.6)
	<b>\$10,213.6</b>	\$10,402.6	\$ 9,824.1

Other profits are primarily comprised of miscellaneous corporate profits as well as operating profits related to divested products or businesses and other supply sales. Adjustments represent the elimination of the effect of double counting certain items of income and expense. Equity income (loss) from affiliates includes taxes paid at the joint venture level and a portion of equity income that is not reported in segment profits. Other expenses, net, include expenses from corporate and manufacturing cost centers and other miscellaneous income (expense), net.

Net property, plant and equipment included \$10.8 billion, \$9.9 billion and \$8.8 billion of assets located in the United States and \$3.4 billion, \$3.2 billion and \$2.7 billion of assets located outside the United States in 2002, 2001 and 2000, respectively. The Company does not disaggregate assets on a products and services basis for internal management reporting and, therefore, such information is not presented.

In January 2002, the Company announced plans to establish Medco Health as a separate, publicly-traded company. Medco Health converted from a limited liability company to a Delaware corporation in May 2002 and changed its name from Merck-Medco Managed Care, L.L.C. to Medco Health Solutions, Inc. In July 2002, Merck announced that due solely to market conditions it was postponing an initial public offering (IPO) of shares of Medco Health and it withdrew the associated equity registration statement. Merck remains fully committed to the establishment of Medco Health as a separate, publicly-traded company and intends to complete the separation in mid-2003, subject to market conditions.

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### Management's Report

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Primary responsibility for the integrity and objectivity of the Company's financial statements rests with management. The financial statements report on management's stewardship of Company assets. These statements are prepared in conformity with generally accepted accounting principles and, accordingly, include amounts that are based on management's best estimates and judgments. Non-financial information included in the Annual Report has also been prepared by management and is consistent with the financial statements.

To assure that financial information is reliable and assets are safeguarded, management maintains an effective system of internal controls and procedures, important elements of which include: careful selection, training and development of operating and financial managers; an organization that provides appropriate division of responsibility, and communications aimed at assuring that Company policies and procedures are understood throughout the organization. In establishing internal controls, management weighs the costs of such systems against the benefits it believes such systems will provide. A staff of internal auditors regularly monitors the adequacy and application of internal controls on a worldwide basis.

To insure that personnel continue to understand the system of internal controls and procedures, and policies concerning good and prudent business practices, the Company periodically conducts the Management's Stewardship Program for key management and financial personnel. This program reinforces the importance and understanding of internal controls by reviewing key corporate policies, procedures and systems. In addition, an ethical business practices program has been implemented to reinforce the Company's long-standing commitment to high ethical standards in the conduct of its business.

The independent public accountants have audited the Company's consolidated financial statements as described in their report. Although their audits were not designed for the purpose of forming an opinion on internal controls, the Company's accounting systems, procedures and internal controls were subject to testing and other auditing procedures sufficient to enable the independent public accountants to render their opinion on the Company's financial statements.

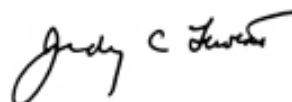
The recommendations of the internal auditors and independent public accountants are reviewed by management. Control procedures have been implemented or revised as appropriate to respond to these recommendations. No material control weaknesses have been brought to the attention of management. In management's opinion, for the year ended December 31, 2002, the internal control system was strong and accomplished the objectives discussed herein.

The financial statements and other financial information included in the Annual Report fairly present, in all material respects, the Company's financial condition, results of operations and cash flows. Our formal certification to the Securities and Exchange Commission is included in the Company's Form 10-K filing.



Raymond V. Gilmartin

*Chairman, President and  
Chief Executive Officer*



Judy C. Lewent

*Executive Vice President  
& Chief Financial Officer  
President, Human  
Health Asia*

### Audit Committee's Report

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The Board of Directors and the Audit Committee dismissed Arthur Andersen LLP as the Company's independent public accountants in February 2002 and engaged PricewaterhouseCoopers LLP to serve as the Company's independent public accountants for the fiscal year 2002. The Audit Committee, comprised of independent directors, met with the independent public accountants, management and internal auditors to assure that all were carrying out their respective responsibilities. The Audit Committee discussed with and received a letter from the independent public accountants confirming their independence. Both the independent public accountants and the internal auditors had full access to the Committee, including regular meetings without management present.

The Audit Committee met with the independent public accountants to discuss their fees and the scope and results of their audit work, including the adequacy of internal controls and the quality of financial reporting. The Committee also discussed with the independent public accountants their judgments regarding the quality and acceptability of the Company's accounting principles, the clarity of its disclosures and the degree of aggressiveness or conservatism of

its accounting principles and underlying estimates. The Audit Committee reviewed and discussed the audited financial statements with management and recommended to the Board of Directors that these financial statements be included in the Company's Form 10-K filing with the Securities and Exchange Commission.

Heidi G. Miller

*Chairperson*

Lawrence A. Bossidy

Thomas E. Shenk  
Samuel O. Thier

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**Compensation and Benefits Committee's Report**

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The Compensation and Benefits Committee, comprised of independent directors, approves compensation objectives and policies for all employees and sets compensation for the Company's executive officers. The Committee seeks to ensure that rewards are closely linked to Company, division, team and individual performances. The Committee also seeks to ensure that compensation and benefits are set at levels that enable Merck to attract and retain high-quality employees. The Committee views stock ownership as a vehicle to align the interests of employees with those of the Company's stockholders. Consistent with the long-term focus inherent in the Company's R&D-based pharmaceutical business, it is the policy of the Committee to make a high proportion of executive officer compensation dependent on long-term performance and on enhancing stockholder value.

Lawrence A. Bossidy

*Chairperson*

William G. Bowen

Johnnetta B. Cole  
William N. Kelley

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**Reports of Independent Public Accountants**

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To the Stockholders and the

Board of Directors of Merck & Co., Inc.:

In our opinion, the accompanying consolidated balance sheet as of December 31, 2002 and the related consolidated statements of income, of retained earnings, of comprehensive income, and of cash flows present fairly, in all material respects, the financial position of Merck & Co., Inc. and its subsidiaries at December 31, 2002, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion. The financial statements of Merck & Co., Inc. as of December 31, 2001 and for each of the two years in the period ended December 31, 2001, prior to the additional disclosures in Notes 2 and 7, were audited by other independent accountants who have ceased operations. Those independent accountants expressed an unqualified opinion on those financial statements in their report dated January 22, 2002.

As discussed in Note 2 to the financial statements, the Company has adopted Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets," effective January 1, 2002.

As discussed above, the financial statements of Merck & Co., Inc. as of December 31, 2001 and for each of the two years in the period ended December 31, 2001, were audited by other independent accountants who have ceased operations. As described in Note 2, these financial statements have been revised to include the transitional disclosures required by SFAS No. 142, "Goodwill and Other Intangible Assets," which was adopted by the Company as of January 1, 2002. We audited the transitional disclosures contained in Notes 2 and 7. In our opinion, the transitional disclosures for 2001 and 2000 in Notes 2 and 7 are appropriate. However, we were not engaged to audit, review, or apply any procedures to the 2001 and 2000 financial statements of the Company other than with respect to such disclosures and, accordingly, we do not express an opinion or any other form of assurance on the 2001 and 2000 financial statements taken as a whole.



Florham Park,

PricewaterhouseCoopers LLP

New Jersey

January 28, 2003

*The following is a copy of the audit report previously issued by Arthur Andersen LLP in connection with Merck & Co., Inc.'s filing of its annual report on Form 10-K for the year ended December 31, 2001. This audit report has not been reissued by Arthur Andersen LLP in connection with this filing of the Company's annual report on Form 10-K. See Exhibit 23.2 for further discussion. The consolidated balance sheet as of December 31, 2000, and the consolidated statements of income, retained earnings, comprehensive income and cash flows for the year ended December 31, 1999 have not been included in the accompanying financial statements.*

To the Stockholders and

Board of Directors of Merck & Co., Inc.:

We have audited the accompanying consolidated balance sheet of Merck & Co., Inc. (a New Jersey corporation) and subsidiaries as of December 31, 2001 and 2000, and the related consolidated statements of income, retained earnings, comprehensive income and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Merck & Co., Inc. and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.



New York, New York

ARTHUR ANDERSEN LLP

January 22, 2002



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**Selected Financial Data**<sup>(1)</sup>

Merck & Co., Inc. and Subsidiaries

(\$ in millions except per share amounts)

	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992 <sup>(2)</sup>
<b>Results for Year:</b>											
Sales	<b>\$51,790.3</b>	\$47,715.7	\$40,363.2	\$32,714.0	\$26,898.2	\$23,636.9	\$19,828.7	\$16,681.1	\$14,969.8	\$10,498.2	\$9,662.5
Materials and production costs	<b>33,053.6</b>	28,976.5	22,443.5	17,534.2	13,925.4	11,790.3	9,319.2	7,456.3	5,962.7	2,497.6	2,096.1
Marketing and administrative expenses	<b>6,186.8</b>	6,224.4	6,167.7	5,199.9	4,511.4	4,299.2	3,841.3	3,297.8	3,177.5	2,913.9	2,963.3
Research and development expenses	<b>2,677.2</b>	2,456.4	2,343.8	2,068.3	1,821.1	1,683.7	1,487.3	1,331.4	1,230.6	1,172.8	1,111.6
Acquired research	—	—	—	—	1,039.5	—	—	—	—	—	—
Equity (income) loss from affiliates	<b>(644.7)</b>	(685.9)	(764.9)	(762.0)	(884.3)	(727.9)	(600.7)	(346.3)	(56.6)	26.1	(25.8)
Gains on sales of businesses	—	—	—	—	(2,147.7)	(213.4)	—	(682.9)	—	—	—
Restructuring charge	—	—	—	—	—	—	—	—	—	775.0	—
Other (income) expense, net	<b>303.8</b>	341.7	349.0	54.1	499.7	342.7	240.8	827.6	240.4	10.1	(46.3)
Income before taxes	<b>10,213.6</b>	10,402.6	9,824.1	8,619.5	8,133.1	6,462.3	5,540.8	4,797.2	4,415.2	3,102.7	3,563.6
Taxes on income	<b>3,064.1</b>	3,120.8	3,002.4	2,729.0	2,884.9	1,848.2	1,659.5	1,462.0	1,418.2	936.5	1,117.0
Net income	<b>7,149.5</b>	7,281.8	6,821.7	5,890.5	5,248.2	4,614.1	3,881.3	3,335.2	2,997.0	2,166.2	2,446.6
Basic earnings per common share	<b>\$3.17</b>	\$3.18	\$2.96	\$2.51	\$2.21	\$1.92	\$1.60	\$1.35	\$1.19	\$0.94	\$1.06
Earnings per common share assuming dilution	<b>\$3.14</b>	\$3.14	\$2.90	\$2.45	\$2.15	\$1.87	\$1.56	\$1.32	\$1.17	\$0.93	\$1.05
Dividends declared	<b>3,204.2</b>	3,156.1	2,905.7	2,629.3	2,353.0	2,094.8	1,793.4	1,578.0	1,463.1	1,239.0	1,106.9
Dividends paid per common share	<b>\$1.41</b>	\$1.37	\$1.21	\$1.10	\$0.95	\$0.85	\$0.71	\$0.62	\$0.57	\$0.52	\$0.46
Capital expenditures	<b>2,369.7</b>	2,724.7	2,727.8	2,560.5	1,973.4	1,448.8	1,196.7	1,005.5	1,009.3	1,012.7	1,066.6

Source: MERCK & CO INC, 10-K, March 21, 2003

Depreciation	<b>1,239.7</b>	1,080.4	905.5	771.2	700.0	602.4	521.7	463.3	475.6	348.4	290.3
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**Year-End Position:**

Working capital	<b>\$ 2,458.7</b>	\$ 1,417.4	\$ 3,643.8	\$ 2,500.4	\$ 4,159.7	\$ 2,644.4	\$ 2,897.4	\$ 3,870.2	\$ 2,291.4	\$ 541.6	\$ 1,241.1
Property,											
plant and											
equipment											
(net)	<b>14,195.6</b>	13,103.4	11,482.1	9,676.7	7,843.8	6,609.4	5,926.7	5,269.1	5,296.3	4,894.6	4,271.1
Total assets	<b>47,561.2</b>	44,021.2	40,154.9	35,933.7	31,853.4	25,735.9	24,266.9	23,831.8	21,856.6	19,927.5	11,086.0
Long-term debt	<b>4,879.0</b>	4,798.6	3,600.7	3,143.9	3,220.8	1,346.5	1,155.9	1,372.8	1,145.9	1,120.8	495.7
Stockholders'											
equity	<b>18,200.5</b>	16,050.1	14,832.4	13,241.6	12,801.8	12,594.6	11,964.0	11,735.7	11,139.0	10,021.7	5,002.9

**Financial Ratios:**

Net income											
as a % of:											
Sales	<b>13.8 %</b>	15.3 %	16.9 %	18.0 %	19.5 %	19.5 %	19.6 %	20.0 %	20.0 %	20.6 %	25.3 %
Average total											
assets	<b>15.6 %</b>	17.3 %	17.9 %	17.4 %	18.2 %	18.5 %	16.1 %	14.6 %	14.3 %	14.0 %	24.1 %

**Year-End Statistics:**

Average common											
shares											
outstanding											
(millions)	<b>2,257.5</b>	2,288.3	2,306.9	2,349.0	2,378.8	2,409.0	2,427.2	2,472.3	2,514.3	2,313.0	2,307.0
Average common											
shares											
outstanding											
assuming											
dilution											
(millions)	<b>2,277.0</b>	2,322.3	2,353.2	2,404.6	2,441.1	2,469.5	2,489.6	2,527.3	2,557.7	2,332.0	2,330.6
Number of											
stockholders of											
record	<b>246,300</b>	256,200	265,700	280,500	269,600	263,900	247,300	243,000	244,700	231,300	161,200
Number of											
employees	<b>77,300</b>	78,100	69,300	62,300	57,300	53,800	49,100	45,200	47,500	47,100 <sup>(3)</sup>	38,400

<sup>(1)</sup> Amounts after 1992 include the impact of the Medco Health acquisition on November 18, 1993.

<sup>(2)</sup> Results of operations for 1992 exclude the cumulative effect of accounting changes.

<sup>(3)</sup> Increase in 1993 is due to the inclusion of 10,300 Medco Health employees.

## MERCK &amp; CO., INC. SUBSIDIARIES

as of 12/31/2002

Each of the subsidiaries set forth below does business under the name stated. A subsidiary of a subsidiary is indicated by indentation under the immediate parent. All voting securities of the subsidiaries named are owned directly or indirectly by the Company, except where otherwise indicated.

Name	Country or State of Incorporation
Chibret A/S	Denmark
CM Delaware LLC	Delaware
Hangzhou MSD Pharmaceutical Company Limited <sup>1</sup>	China
Hawk and Falcon L.L.C.	Delaware
International Indemnity Ltd.	Bermuda
Johnson & Johnson—Merck Consumer Pharmaceuticals Company <sup>1</sup>	New Jersey
MCM Vaccine Co. <sup>1</sup>	Pennsylvania
Merck and Company, Incorporated	Delaware
Merck SH Inc.	Delaware
Merial Limited/LLC <sup>1</sup>	Great Britain/ Delaware
British United Turkeys Limited <sup>1</sup>	Great Britain
Turkey Research & Development Limited <sup>1</sup>	Great Britain
Merck Capital Resources, Inc.	Delaware
MSD Technology, L.P.	Delaware
Merck Finance Co., Inc.	Delaware
Merck Hamilton, Inc.	California
Merck Capital Ventures, LLC	Delaware
Merck Cardiovascular Health Company	Nevada
MSP Distribution Services (C) LLC <sup>1</sup>	Nevada
MSP Marketing Services (C) LLC <sup>1</sup>	Nevada
Merck Enterprises Canada, Ltd.	Canada
Merck Foreign Sales Corporation Ltd.	Bermuda

Merck Holdings, Inc.	Delaware
Chippewa Holdings LLC	Delaware
Algonquin SarL	Luxembourg
Frosst Laboratories, Inc.	Delaware
Frosst Portuguesa—Produtos Farmaceuticos, Lda.	Portugal
Istituto Gentili S.p.A./Inc.	Italy/Delaware
KBI Inc.	Delaware
KBI Sub Inc.	Delaware
KBI-E Inc.	Delaware
KBI-P Inc.	Delaware
Merck Borinquen Holdings, Inc.	Delaware
Merck Sharp & Dohme Quimica de Puerto Rico, Inc.	Delaware
Merck-Medco Holdings II Corp.	Delaware
Cloverleaf International Holdings S.A.	Luxembourg
BRC Ltd	Bermuda
Coordinated Patient Care Scandinavia AS	Norway
Infodoc AS	Norway
Infodoc International AS <sup>1</sup>	Norway
Medco Holdings S. de R.L. de C.V.	Mexico
Medco de Mexico Managed Care S. de R.L. de C.V.	Mexico
Medco Servicios de Mexico, S. de R.L. de C.V.	Mexico
Farmacox-Companhia Farmaceutica, Lda	Portugal
Farmasix-Produtos Farmaceuticos, Lda	Portugal
Fontelabor-Produtos Farmaceuticos, Lda.	Portugal
Gestion Integrada De Salud, Analisis De Resultados Y Evidencia Medichip, S.L.	Spain
Merck Sharp & Dohme Asia Pacific Services Pte Ltd.	Singapore
Merck Sharp & Dohme (Australia) Pty. Limited	Australia
AMRAD Pharmaceuticals Pty. Ltd.	Australia
Merck Sharp & Dohme Finance Europe Limited	Great Britain
Merck Sharp & Dohme B.V. <sup>1</sup>	Netherlands
Abello Farmacia, S.L.	Spain
Financiere MSD S.A.S.	France
Aventis Pasteur MSD Gestion S.A. <sup>1</sup>	France
Aventis Pasteur MSD SNC <sup>1</sup>	France
Aventis Pasteur MSD A/S	Denmark
Aventis Pasteur MSD GmbH	Austria
Aventis Pasteur MSD GmbH	Germany
Aventis Pasteur MSD Ltd.	Great Britain
Aventis Pasteur MSD Ltd.	Ireland
Aventis Pasteur MSD N.V./S.A.	Belgium
Aventis Pasteur MSD S.A.	Spain
Aventis Pasteur MSD S.p.A.	Italy
Pasteur Vaccins S.A.	France

Laboratoires Martin-Johnson & Johnson-MSD S.A.S. <sup>1</sup>	France
Laboratoires Merck Sharp & Dohme-Chibret SNC	France
MSD (Nippon Holdings) BV	Netherlands
Banyu Pharmaceutical Company, Ltd. <sup>1</sup>	Japan
Banyu-A.S.C. Co., Ltd.	Japan
Nippon Merck-Banyu Co., Ltd.	Japan
Laboratorios Biopat, S.A.	Spain
Laboratorios Chibret, S.A.	Spain
Laboratorios Frosst, S.A.	Spain
Laboratorios Neurogard, S.A.	Spain
Merck Sharp & Dohme GmbH	Austria
Merck Sharp & Dohme Holdings de Mexico, S.A. de C.V.	Mexico
Merck Sharp & Dohme de Mexico, S.A. de C.V.	Mexico
Merck Sharp & Dohme (Israel-1996) Company Ltd.	Israel
Merck Sharp & Dohme (Italia) S.p.A.	Italy
Centra Medicamenta OTC SpA <sup>1</sup>	Italy
Istituto Di Ricerche Di Biologia Molecolare S.p.A.	Italy
MSD (Proprietary) Limited	South Africa
MSD Sharp & Dohme GmbH	Germany
Chibret Pharmazeutische GmbH	Germany
Dieckmann Arzneimittel GmbH	Germany
Woelm Pharma GmbH & Co. <sup>1</sup>	Germany
MSD Chibropharm GmbH	Germany
MSD Unterstutzungskasse GmbH	Germany
Varipharm Arzneimittel GmbH	Germany
Sharp & Dohme, S.A.	Spain
Merck Sharp & Dohme Chibret A.G.	Switzerland
Merck Sharp & Dohme de Venezuela S.R.L.	Venezuela
Merck Sharp & Dohme (Holdings) Limited	Great Britain
Charles E. Frosst (U.K.) Limited	Great Britain
Merck Sharp & Dohme Limited	Great Britain
Johnson & Johnson•MSD Consumer Pharmaceuticals Limited <sup>1</sup>	Great Britain
The MSD Foundation Limited	Great Britain
Thomas Morson & Son Limited	Great Britain
Merck Sharp & Dohme IDEA, Inc.	Switzerland
Merck Sharp & Dohme d.o.o.	Croatia
Merck Sharp & Dohme Tunisie Sarl	Tunisia
Merck Sharp & Dohme (Sweden) A.B.	Sweden
Merck Sharp & Dohme Trading & Service Limited Liability Company	Hungary
MSD Ireland (Holdings) S.A.	Luxembourg
European Insurance Risk Excess Limited	Ireland
Fregenal Holdings S.A.	Panama
Frosst Iberica, S.A.	Spain
Laboratorios Abello, S.A.	Spain

Laboratorios Quimico–Farmaceuticos Chibret, Lda.	Portugal
Merck Sharp & Dohme de Espana, S.A.	Spain
Merck Sharp & Dohme, Limitada	Portugal
MSD Finance, B.V.	Netherlands
MSD Overseas Manufacturing Co.	Bermuda
Blue Jay Investments C.V.	Netherlands
MSD Ireland (Investment) Ltd.	Bermuda
MSD Latin America Services Ltd.	Bermuda
MSD Overseas Manufacturing Co. (Ireland)	Ireland
Tradewinds Manufacturing SRL	Barbados
MSD Technology Singapore Pte. Ltd. <sup>1</sup>	Singapore
MSP Singapore Company, LLC	Delaware
MSD–SP Ltd.	Great Britain
MSD–Essex GmbH	Switzerland
MSP Singapore–Sub, LLC	Delaware
MSD Warwick (Manufacturing) Ltd.	Bermuda
MSD Somerset Ltd.	Bermuda
Crosswinds B.V.	Netherlands
Merck Sharp & Dohme (Ireland) Ltd.	Bermuda
MSD Pembroke Ltd.	Bermuda
Merck Sharp & Dohme (Puerto Rico) Ltd.	Bermuda
Merck Sharp & Dohme (Singapore) Ltd.	Bermuda
Transrow Manufacturing Ltd.	Bermuda
Neopharmed S.p.A.	Italy
MSD (Norge) A/S	Norway
MSD Ventures Singapore Pte. Ltd.	Singapore
Ruskin Limited	Bermuda
Suomen MSD Oy	Finland
Kiinteisto Oy Viistotie 11	Finland
Merck Frosst Canada & Co.	Canada
Maple Leaf Holdings SRL	Barbados
Merck Frosst Canada Ltd.	Canada
MSD (Japan) Co., Ltd.	Japan
Merck Sharp & Dohme (I.A.) Corp.	Delaware
Merck Sharp & Dohme (Argentina) Inc.	Delaware
MSD Korea Ltd.	Korea/Delaware
Merck Sharp Dohme Ilaclari Limited Sirketi	Turkey
Merck Sharp & Dohme Farmaceutica Ltda.	Brazil
Prodome Quimica e Farmaceutica Ltda. <sup>1</sup>	Brazil
Merck Sharp & Dohme (International) Limited	Bermuda
Merck Sharp & Dohme (Asia) Limited	Hong Kong
Merck Sharp & Dohme (China) Limited	Hong Kong
Merck Sharp & Dohme SAS	France
Merck Sharp & Dohme International Services B.V.	Netherlands

Merck Sharp & Dohme—Lebanon S.A.L.	Lebanon
Merck Sharp & Dohme L.L.C.	Russian Federation
Merck Sharp & Dohme (Middle East) Limited	Cyprus
Merck Sharp & Dohme of Pakistan Limited	Pakistan
Merck Sharp & Dohme S.A.R.L.	Morocco
Merck Technology (U.S.) Company, Inc.	Nevada
MSP Technology (U.S.) Company, LLC. <sup>1</sup>	Delaware
Merck Ventures, Inc.	Delaware
MSD Lakemedel (Scandinavia) Aktiebolag	Sweden
Readington Holdings, Inc.	New Jersey
STELLARx, Inc.	Nevada
TELERx Marketing Inc.	Pennsylvania
Merck Institute for Vaccinology	Delaware
Merck Investment Co., Inc.	Delaware
Merck Liability Management Company	Delaware
Merck LMC Cash Management (Bermuda) Ltd.	Bermuda
Merck LMC Cash Management, Inc.	Delaware
Medco Health Solutions, Inc.	Delaware
DM–MG, L.L.C.	Delaware
MedcoCal, Inc.	California
medcohealth.com, L.L.C.	New Jersey
Medco Containment Insurance Company of New Jersey	New Jersey
Medco Containment Insurance Company of New York	New York
Medco Containment Life Insurance Company	Pennsylvania
Medco Health, L.L.C.	Delaware
Medco Health Solutions of Columbus North, Ltd.	Ohio
Medco Health Solutions of Columbus West, Ltd.	Ohio
Medco Health Solutions of Henderson, Nevada, L.L.C.	Delaware
Medco Health Solutions of Hidden River, L.C.	Florida
Medco Health Solutions of Las Vegas, Inc.	Nevada
Medco Health Solutions of Mechanicsburg, L.L.C.	Pennsylvania
Medco Health Solutions of Netpark, L.L.C.	Delaware
Medco Health Solutions of North Versailles, L.L.C.	Pennsylvania
Medco Health Solutions of Parsippany, L.L.C.	New Jersey
Medco Health Solutions of Richmond, L.L.C.	Virginia
Medco Health Solutions of Sabal Park, L.C.	Florida
Medco Health Solutions of Spokane, Inc.	Washington
Medco Health Solutions of Texas, L.L.C.	Texas
Medco Health Solutions of Willingboro, L.L.C.	New Jersey
Merck–Medco of Willingboro Urban Renewal, L.L.C.	New Jersey

Merck–Medco Rx Services of Florida, L.C.	Florida
Merck–Medco Rx Services of Massachusetts, L.L.C.	Massachusetts
Merck–Medco Rx Services of New York, L.L.C.	New York
Merck–Medco Rx Services of Oklahoma, L.L.C.	Oklahoma
MW Holdings, L.L.C.	Delaware
NJRE, L.L.C.	New Jersey
National Rx Services, Inc. of Missouri	Missouri
National Rx Services No. 3, Inc. of Ohio	Ohio
New York PAID Independent Practice Association, L.L.C.	New York
NRx Federal Corp.	Delaware
Paid Direct, Inc.	Delaware
ProVantage Health Services, Inc.	Delaware
Bravell, Inc.	Wisconsin
PharMark Corporation	Delaware
ProVantage Mail Services, Inc.	Minnesota
PROVMED, LLC	Wisconsin
PVHS, Inc.	Delaware
Replacement Distribution Center, Inc.	Ohio
RxHub, L.L.C. <sup>1</sup>	Delaware
The Institute for Effectiveness Research, L.L.C.	Delaware
Systemed, L.L.C.	Delaware
Xceleron Health, L.L.C. <sup>1</sup>	Delaware
Merck Resource Management, Inc.	Delaware
Merck Respiratory Health Company	Nevada
MSP Distribution Services (R) LLC <sup>1</sup>	Nevada
MSP Marketing Services (R) LLC <sup>1</sup>	Nevada
Merck Sharp & Dohme (Europe) Inc.	Delaware
Merck Sharp & Dohme Industria Quimica e Veterinaria Limitada	Brazil
Merck Sharp & Dohme (New Zealand) Limited	New Zealand
Merck Sharp & Dohme Overseas Finance N.V.	Neth. Antilles
Merck Sharp & Dohme (Panama) S.A.	Panama
Merck Sharp & Dohme Peru SRL	Peru
Merck Sharp & Dohme (Philippines) Inc.	Philippines



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MSD International Holdings, Inc.

Delaware

Rosetta Inpharmatics LLC

Delaware

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<sup>1</sup> own less than 100%

**NOTICE REGARDING CONSENT OF ARTHUR ANDERSEN LLP**

Section 11(a) of the Securities Act of 1933, as amended (the "Securities Act"), provides that in case any part of a registration statement, when such part became effective, contained an untrue statement of a material fact, or omitted to state a material fact required to be stated therein or necessary to make the statements therein not misleading, any person acquiring such security (unless it is proved that at the time of such acquisition such person knew of such untruth or omission) may sue, among others, every accountant who has with his consent been named as having prepared or certified any part of the registration statement, or as having prepared or certified any report or valuation which is used in connection with the registration statement, with respect to the statement in such registration statement, report, or valuation, which purports to have been prepared or certified by such accountant.

The Company's consolidated financial statements for each of the years ended 2001 and 2000, included in this Form 10-K, have been audited by Arthur Andersen LLP ("Arthur Andersen"), who issued an audit report dated January 22, 2002 on these consolidated financial statements. This audit report, a copy of which is included in this Form 10-K, is incorporated by reference into the Company's previously filed Registration Statements on Form S-8 (Nos. 33-21087, 33-21088, 33-36101, 33-40177, 33-51235, 33-53463, 33-64273, 33-64665, 333-23293, 333-23295, 333-91769, 333-30526, 333-31762, 333-40282, 333-52264, 333-53246, 333-56696, 333-72206, 333-65796 and 333-101519) and on Form S-3 (Nos. 33-39349, 33-60322, 33-51785, 33-57421, 333-17045, 333-36383, 333-77569, 333-72546 and 333-87034) (collectively, the "Registration Statements").

On February 26, 2002, the Company dismissed Arthur Andersen as its independent public accountants and engaged PricewaterhouseCoopers LLP to serve as the Company's independent public accountants for the fiscal year 2002. The Company understands that the staff of the Securities and Exchange Commission has taken the position that it will not accept consents from Arthur Andersen if the engagement partner and the manager for the Company's audit are no longer with Arthur Andersen. Both the engagement partner and the manager for the Company's audit are no longer with Arthur Andersen and Arthur Andersen has ceased practicing before the Securities and Exchange Commission. As a result, the Company has been unable to obtain Arthur Andersen's written consent to the incorporation by reference into the Registration Statements of their audit report with respect to the Company's financial statements. Under these circumstances, Rule 437a under the Securities Act permits the Company to file this Form 10-K, which is incorporated by reference into the Registration Statements, without a written consent from Arthur Andersen. Because Arthur Andersen has not consented to the inclusion of their audit report in the Registration Statements, Arthur Andersen will not have any liability under Section 11(a) of the Securities Act for any untrue statements of a material fact contained in the financial statements audited by Arthur Andersen and incorporated by reference into the Registration Statements or any omission of a material fact required to be stated therein. Accordingly, investors will not be able to assert a claim against Arthur Andersen under Section 11(a) of the Securities Act for any purchases of securities under the Registration Statements made on or after the date of this Form 10-K.

**POWER OF ATTORNEY**

Each of the undersigned does hereby appoint CELIA A. COLBERT and KENNETH C. FRAZIER and each of them, severally, his/her true and lawful attorney or attorneys to execute on behalf of the undersigned (whether on behalf of the Company, or as an officer or director thereof, or by attesting the seal of the Company, or otherwise) the Form 10-K Annual Report of Merck & Co., Inc. for the fiscal year ended December 31, 2002 under the Securities Exchange Act of 1934, including amendments thereto and all exhibits and other documents in connection therewith.

IN WITNESS WHEREOF, this instrument has been duly executed as of the 25th day of February, 2003.

MERCK & CO., INC.

By:

/s/ RAYMOND V. GILMARTIN

**Raymond V. Gilmartin**

**(Chairman of the Board, President  
and Chief Executive Officer)**

/s/ RAYMOND V. GILMARTIN

**Raymond V. Gilmartin**

Chairman of the Board, President

and Chief Executive Officer

(Principal Executive Officer; Director)

/s/ JUDY C. LEWENT

**Judy C. Lewent**

Executive Vice President & Chief Financial Officer

President, Human Health Asia; (Principal Financial Officer)

/s/ RICHARD C. HENRIQUES, JR

**Richard C. Henriques, Jr**

Vice President, Controller

(Principal Accounting Officer)

**DIRECTORS**

/s/ LAWRENCE A. BOSSIDY

**Lawrence A. Bossidy**

/s/ WILLIAM N. KELLEY

**William N. Kelley**

/s/ WILLIAM G. BOWEN

**William G. Bowen**

/s/ HEIDI G. MILLER

**Heidi G. Miller**

/s/ JOHNETTA B. COLE

**Johnnetta B. Cole**

/s/ THOMAS E. SHENK

**Thomas E. Sherk**

/s/ WILLIAM M. DALEY

**William M. Daley**

**Anne M. Tatlock**

/s/ SAMUEL O. THIER

**Samuel O. Thier**

**William B. Harrison, Jr.**

I, Debra A. Bollwage, Assistant Secretary of MERCK & CO., Inc., a Corporation duly organized and existing under the laws of the State of New Jersey, do hereby certify that the following is a true copy of a resolution adopted at a meeting of the Directors of said Corporation held in New York City, New York, on February 25, 2003, duly called in accordance with the provisions of the By-Laws of said Corporation, and at which a quorum of Directors was present:

“Special Resolution No. 5– 2003

RESOLVED, that the proposed form of Form 10–K Annual Report of the Company for the fiscal year ended December 31, 2002 presented to this meeting is hereby approved with such changes as the proper officers of the Company, with the advice of counsel, deem appropriate; and

RESOLVED, that each officer and director who may be required to execute the aforesaid Form 10–K Annual Report or any amendments thereto (whether on behalf of the Company or as an officer or director thereof, or by attesting the seal of the Company, or otherwise) is hereby authorized to execute a power of attorney appointing Celia A. Colbert and Kenneth C. Frazier and each of them, severally, his/her true and lawful attorney or attorneys to execute in his/her name, place and stead (in any such capacity) such Form 10–K Annual Report and any and all amendments thereto and any and all exhibits and other documents necessary or incidental in connection therewith and to file the same with the Securities and Exchange Commission, each of said attorneys to have power to act with or without the others, and to have full power and authority to do and perform in the name and on behalf of each of said officers and directors, or both, as the case may be, every act whatsoever necessary or advisable to be done in the premises as fully and to all intents and purposes as any such officer or director might or could do in person.”

IN WITNESS WHEREOF, I have hereunto subscribed my signature and affixed the seal of the Corporation this 20th day of March, 2003.

[Corporate Seal]

/s/ DEBRA A. BOLLWAGE

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**Debra A. Bollwage**  
Assistant Secretary

**Certification**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Merck & Co., Inc. (the "Company"), hereby certifies that the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 21, 2003

/s/ RAYMOND V. GILMARTIN

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Name: Raymond V. Gilmartin  
Title: Chairman, President and  
Chief Executive Officer

**Certification**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Merck & Co., Inc. (the "Company"), hereby certifies that the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2002 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: March 21, 2003

/s/ JUDY C. LEWENT

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Name: Judy C. Lewent  
Title: Executive Vice President &  
Chief Financial Officer  
President, Human Health Asia

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