



Improving Quality of Life

Prospects in Pharmaceuticals and Chemicals |

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Merck 2003 at a Glance | Solid Performance

Merck Group The Merck Group is a global pharmaceutical and chemical company, which includes VWR International, a market leader in the laboratory distribution business. We focus on innovative drugs and chemicals. Sales of the Merck Group decreased year-on-year by 2.7% to EUR 7,202 million. Adjusted for currency effects and divestitures, however, organic growth was 7.3%. Our research and development expenditure, which has been substantial for a number of years, was kept on the previous year's level at EUR 605 million. Our operating result increased by 19% to EUR 736 million from EUR 616 million in 2002.

Pharmaceuticals Our pharmaceutical business comprises ethical drugs – e.g. for the treatment of metabolic and cardiovascular diseases; generics; and consumer health care products. Sales in the Pharmaceuticals business sector increased by 4.8%. Research and development expenditure increased by 1.4% to EUR 506 million: In Ethicals, we invested EUR 418 million or 24% of the division's sales in R & D, focusing on the substances in our oncology pipeline. The Pharmaceuticals business sector accounted for 46% of the Merck Group's total sales and for 48% of its operating result.

Chemicals The Chemicals business sector comprises five divisions offering high-tech applications: liquid crystals for displays; effect pigments for industry and cosmetics; analytical reagents and test kits for the pharmaceutical, chemical and food industries, as well as environmental analysis; electronic chemicals for chip manufacture; products and services along the entire drug development chain in the pharmaceutical and biotech industry. Sales decreased by 4.6%; the operating result increased by 16%. Excluding intragroup sales with Laboratory Distribution, the Chemicals business sector accounted for 21% of the Merck Group's sales and 41% of its operating result.

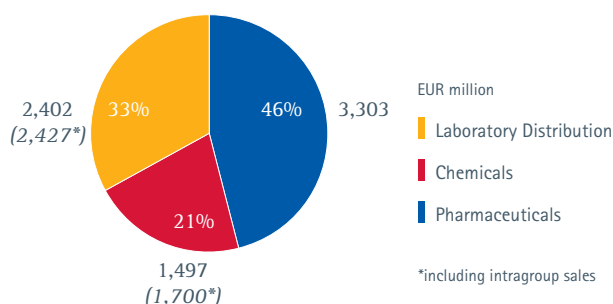
Laboratory Distribution The Laboratory Distribution business sector, which operates under the name VWR International, Inc., comprises our business for the distribution of laboratory chemicals, equipment and consumables, and offers a comprehensive range of services. The sales of this leading global full-service provider in the life science industry decreased by 10%; its operating result fell 6.1%. Laboratory Distribution accounted for 33% of the Merck Group's total sales and 11% of its operating result.

Summary of Key Figures in 2003

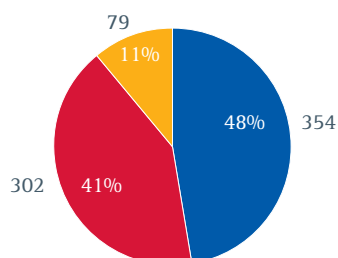
	Merck Group	Pharmaceuticals	Chemicals	Laboratory Distribution
Sales in EUR million	7,202	3,303	1,700*	2,427*
Operating result in EUR million	736	354	302	79
Return on sales in %	10.2	10.7	17.8	3.3
EBIT in EUR million	538	157	302	79

*including intragroup sales

Sales by Business Sector 2003



Operating Result by Business Sector 2003



Our Milestones in Oncology

Market Launch of Erbitux™ Brings Hope to Colorectal Cancer Patients

The marketing authorization of Erbitux™ means that Merck can now offer patients a new, targeted therapy for metastatic colorectal cancer. The monoclonal antibody selectively blocks the epidermal growth factor receptor, which is present on the surface of cancer cells and plays a vital role in the growth and spread of the tumor. This therapeutic progress enables us to prolong cancer patients' life expectancy and improve their quality of life. In order to secure the company's future, Merck invested EUR 140 million in research and development for innovative cancer therapies in 2003.



Years of preclinical and clinical research are opening up the prospect of new cancer therapies that work by blocking uncontrolled cell growth. Ina Seibel and Claudia Wilm in Darmstadt are members of a global Merck team that searches for targeted active substances with fewer side effects.



July 2003, Darmstadt, Germany | The marketing authorization application submitted by Tilo Netzer (top row, third from left) and his Regulatory Affairs team to the Swiss regulatory authority Swissmedic and the European Agency for the Evaluation of Medicinal Products (EMA) in London comprised more than half a million pages.



June 2003, Chicago, USA | Bernhard Scheuble speaking on the occasion of the Annual Congress of the American Society of Clinical Oncology (ASCO) about the results of the BOND study: A positive clinical effect was observed in more than half the patients.



December 2003, Berne, Switzerland | Following an accelerated procedure, Swissmedic grants marketing authorization for Erbitux™ in combination with irinotecan for treating metastatic colorectal cancer. We are expecting to gain marketing approval throughout Europe by mid-2004.

Merck Business Development 1999–2003

EUR million	1999	2000	2001	2002	Change in %	2003
Sales	5,347	6,740	7,528	7,400*	-2.7	7,202
Pharmaceuticals	2,858	2,914	3,323	3,153*	4.8	3,303
Chemicals	1,354	1,642	1,697	1,782	-4.6	1,700
Laboratory Distribution	1,262	2,374	2,754	2,711	-10.5	2,427
Intragroup sales	-151	-190	-246	-246	-7.3	-228
Operating result	659	746	877	616	19.4	736
Pharmaceuticals	498	455	581	272	30.1	354
Chemicals	119	247	204	260	16.4	302
Laboratory Distribution	47	44	92	84	-6.1	79
Earnings before interest and tax (EBIT)	581	747	1,286	559	-3.8	538
Profit before tax	440	524	1,078	412	2.7	423
Profit after tax	235	262	655	215	1.1	218
Free cash flow	-1,081	324	664	441	0.1	442
EBITDA (EBIT before depreciation and amortization)	900	1,184	1,694	985	2.4	1,008
Investments in property, plant and equipment	359	427	470	377	-25.5	281
Research and development	498	546	577	608	-0.6	605
Balance sheet total	7,845	8,235	8,255	7,511	-7.0	6,982
Net equity	1,870	1,947	2,336	2,054	15.1	2,363
Employees (number as of Dec. 31)	32,721	33,520	34,294	34,504	-0.9	34,206
Return on sales in % (ROS: operating result/sales)	12.3	11.1	11.6	8.3*		10.2
Return on capital employed in % (ROCE: operating result/average operating assets)	11.9	11.6	13.5	9.6		12.1
Earnings per share in EUR (for calculation see page 16)	1.32	1.44	3.66	1.18	-2.5	1.15
Dividend per share in EUR	0.85	0.90	0.95	1.00	-20.0	0.80

*Figures for 2002 reclassified (see page 28)

Letter from Bernhard Scheuble |



Prof. Dr. Bernhard Scheuble |

Chairman of the
Executive Board of
Merck KGaA



Dear Shareholders and Friends of Merck,

In my last letter to you in the 2002 Annual Report, I stated that we – the partners, management and employees of Merck – were confident in the future of Merck and had good reason to be so. The successes that we have achieved in the course of 2003 have strengthened our confidence.

I would like to make special mention of the significant improvement in Merck's balance sheet. Contributing to this improvement was the good operating result, which – despite the negative currency effects – totaled EUR 735 million, representing an increase of 19% over that of the previous year. Profit after tax could not quite keep up with this development due to substantial exceptional items. However, we see this as a good provision for the future. Investments are now at the level of depreciations. Together with the good business development, this results in a highly satisfactory free cash flow which, at over EUR 440 million, has reached a record high for Merck. Together with the increase of nearly 10% in our share capital in July, we were thus able to significantly reduce our debt. The ratio of net financial obligations to net equity, at 0.62, was more favorable than it had been for many years. This good development was acknowledged with an "investment-grade rating" by two leading international rating agencies in Merck's first ever rating process.

The good performance of Chemicals was once again led by the outstanding result of the Liquid Crystals business. The 31% organic sales growth of Liquid Crystals was driven particularly by high-quality TFT monitors. The new liquid crystal production facility in Darmstadt is almost completed and will go into operation during 2004. At around EUR 250 million, this represents the largest single investment in the history of Merck. It enables us to nearly triple our capacity. By this, Merck emphasizes not only its confidence in the future of liquid crystals but, in particular, our commitment to fulfilling our

customers' expectations at all times. We are particularly pleased about the expansion of our LCD product portfolio to include color filters, which we are manufacturing in Taiwan. The outstanding performance of our Liquid Crystals team was honored internally by the Merck Innovation Award and externally by the German Future Prize awarded by the German Federal President. The other Chemicals divisions also achieved good development. I would like to make special mention of the cash flow contributions by the Analytics & Reagents division. In Chemicals and Pharmaceuticals, Merck places a special focus on innovations – innovative products and innovative services for our customers worldwide.

The good development of Pharmaceuticals, both in terms of sales and profit, was the result of a stable Consumer Health Care business, major changes in the Ethicals division, and an impressive growth in Generics. The highly satisfying contributions to profit by Generics were attributable to the ulcer treatment omeprazole as well as good development in many countries. Setbacks in the diabetes pipeline will lead to restructuring measures in production and research, particularly in France. The market launch of the lipid modulator Niaspan™ and the good development of our established diabetes and cardiovascular products in our markets make us confident, however, that our newly formed unit CardioMetabolic Care will establish itself as a major mainstay of our business. We are very proud of being able to provide doctors and patients with a new therapeutic approach to cancer: Our oncology product Erbitux™ gained its first marketing authorization of in Switzerland at the end of 2003.

The disposal of our share in the orthopedics company Biomet-Merck, announced in December 2003, for USD 300 million and the disposal of our laboratory distribution company VWR, announced at the time of this Annual Report, for USD 1.68 billion are important milestones in the implementation of Merck's strategy. These planned transactions will further improve Merck's financial situation. Merck will be almost free of financial debt. More important, however, is the fact that these transactions will enable us to systematically expand and strengthen our two core businesses: Pharmaceuticals and Chemicals. This will be our task for the coming years.

The forthcoming disposal of VWR will significantly reduce Merck's sales and operating result in the current year. However, key financial data will improve at the same time. The data for return on sales (ROS) and return on capital employed (ROCE) come closer to our target of 15%. Negative effects on the operating result also are expected due to the lower revenue from our diabetes franchise Glucophage® and reduced licensing revenues for omeprazole. However, because of the improved financial structure and exceptional income, we expect a significant growth in profit after tax.

We owe the successes of the past months, good business development and attractive transactions to the commitment of our employees and the trust of our customers. I would like to express my sincere thanks to all of them. Our successes to date will not stop us from critically questioning our actions in the future. However, they also strengthen our confidence in consistently following and implementing our strategy. With the support of our partners and shareholders we steadfastly face the challenges of the future.

Sincerely,



Bernhard Scheuble

Pioneering Spirit with Tradition

100 Years of Liquid Crystals – LCD Televisions as a Growth Market |



Seeheim, Germany | Who would not just love to have such a large, flat LCD television? Kazuaki Tarumi not only dreamed of having it: The physicist played a decisive role in developing a new generation of substances that enable fast switching times and high contrast. His wife Yuko and his youngest son Jun are naturally very proud of him – as we are, too, of the more than 500 employees working so successfully worldwide in our Liquid Crystals division.

Most people, when they hear the word “digital” today, think computers and digital cameras, as more and more happy moments are recorded in pixels. Although this means that chemistry has passed its zenith in terms of developing film – an area in which Merck also made money for many years – it plays an important role in recording and processing images: The bits and bytes of photos can be viewed immediately on the back of the camera or later – as is often the case – on an LCD monitor. Without Merck’s chemistry, these flat, liquid crystal displays would be inconceivable.

Latest Innovation Wins Multiple Awards

Anyone who purchases a large-format television in future will be able to hang a durable, high-contrast LCD TV on their wall that uses far less energy than plasma screens. Merck is the pioneer in liquid crystal research: Together with display manufacturers in the Far East, it has succeeded in meeting the technical requirements, such as viewing angle independency and a fast picture response time. An international team of physicists, chemists, engineers and applications engineers received the Merck Group’s Innovation Award for this work in September 2003. Three Merck researchers were awarded the German Future Prize by the German Federal President for the patented molecules they developed in Darmstadt for vertical alignment technology. It is this new generation of liquid crystals with extremely short switching times that display manufacturers are using to produce flat, large-format LCD television screens for the first time and that we are now seeing in cinemas.

1904



German physicist Otto Lehmann finds his high-purity “liquid crystals” for research purposes in Merck’s price list in 1904.



1922



Lehmann’s “liquid crystals” were recognized in the scientific community from around the 1920s – also thanks to Merck.

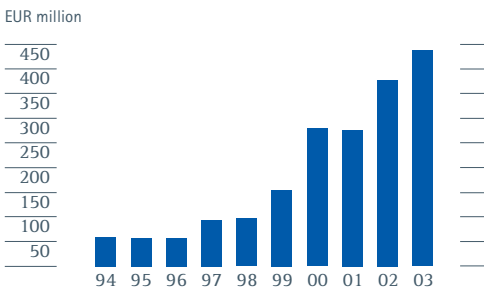


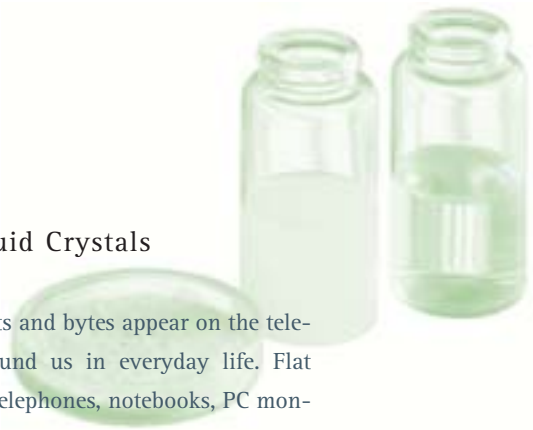
Gyeonggi-do, Korea | Close to the customer: Lee Ki Hong and Choon-Gon Kim oversee production in the technical center of the Liquid Crystals division in Poseung Industrial Park. Merck develops and produces customer-specific liquid crystal mixtures for Korea-based display manufacturers.

More Double-Digit Growth Expected in the Future

More than three million LCD televisions were manufactured in 2003: Investments exceeding 10 billion euros by display manufacturers lead us to expect rapid growth at the expense of conventional televisions with cathode ray tubes. Experts are predicting the sale of around 28 million large-format LCD TVs by 2007, which would then correspond to 14% of the overall television market. LCD TVs will account for more than 20% of sales on the TFT display market. Global sales of liquid crystal displays will double by 2007 from the current figure of just under EUR 30 billion to around EUR 60 billion. With a market share of about 60%, Merck is the leading global manufacturer of liquid crystals. In 2003, we increased our sales of this division by 16% to EUR 438 million, not least due to the latest generation of liquid crystals for LCD TVs.

Liquid Crystals from Merck | Sales Development 1994 – 2003





Growing Market for Liquid Crystals

Liquid crystals not only make bits and bytes appear on the television screen; they are all around us in everyday life. Flat screens can be found in mobile telephones, notebooks, PC monitors, display panels, and in almost all battery-operated, portable devices, whether it is an electric shaver or a child's toy. LCDs already account for almost 90 percent of the global market for flat displays, and this trend is on the increase.

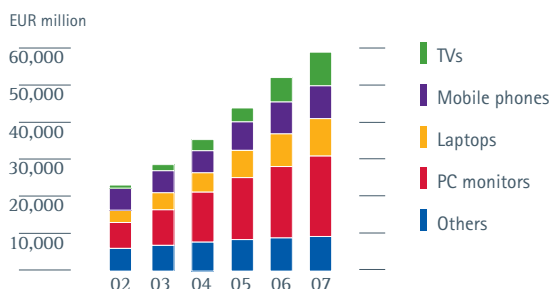
The market for liquid crystals can be split into four main segments:

1. Twisted nematic (TN) applications for the simplest displays
2. Super twisted nematic (STN) technology for mobile phones, personal organizers, personal digital assistants (PDAs) and electronic games, for which low energy consumption and weight saving are a priority
3. Active matrix LCDs for high-quality graphics in notebooks and PC monitors, for which contrast quality is important
4. Special LCDs for large televisions, multimedia LCD front and back projectors, for which viewing angle independency or a fast picture response time are essential.

Merck is developing customer-specific mixtures for these four key applications for almost all major manufacturers and has a very large market share with respect to patented new technologies.

Market Development for LCD-Displays

Source: iSuppli/Stanford Resources



1968



Besides Georg Weber – pictured here performing an evaluation in the central analytical laboratory – five other Merck scientists were involved in researching liquid crystals.



1971



Invention of the twisted nematic cell (TN cell, James Ferguson, Martin Schadt and Werner Helfrich) – used here in a digital clock with "liquid digits" constructed by Merck in 1972.



Seoul, Korea |
Employee Sophia
K. Jeon uses her mobile
phone to take a photo
of herself and her col-
league Dong-Kyu Yoon
in front of the Kyung-
bok Palace in the capi-
tal. Thanks to the color
displays in modern
mobile telephones, the
photos that can be
viewed and sent are of
a high quality.

Special Liquid Crystal Mixtures for Every Display Type

In simple terms, an LC display can be described as a low-voltage panel consisting of two plates of glass with a liquid crystal mixture in between. LCD technology uses one of liquid crystals' special properties: They change their orientation when a voltage is applied. When interacting with polarizers, they either let light filter through or block it out, depending on their alignment in the individual LC cell being energized. Using background lighting it is possible to switch each image dot (pixel) between dark and light; the resulting pattern creates the digital image with the appropriate resolution. Single-color displays are often sufficient, but here, as with color applications, the various properties such as viewing angle, switching times, contrast and resolution are being optimized in terms of their respective cost. A customized liquid crystal mixture has to be developed for each display type to achieve an optimum result.

Research and Production in Europe and the Far East

As the main manufacturer in this high-tech area of chemistry, we have been present at every stage of the rapid market growth of electronic consumer goods and will double our capacities for the multi-phase synthesis of liquid crystals in 2004 to 150 tons a year. We manufacture our optimized LC mixtures – which are tailored to individual customer demands – in Seoul, South Korea, and Tokyo, Japan, and plan to start production in Taoyuan, Taiwan, from 2006. Back in 1980, Merck opened an application laboratory for liquid crystal mixtures in Atsugi, Japan, and the Merck Annual Report in 1983 stated the following: *“Since 1983, liquid crystal mixtures have also been produced locally in order to take maximum advantage of the market opportunities in this sector, which is characterized by rapid technological change.”*

In order to understand these foreign investments that Merck had the foresight to begin – application laboratories were to follow in Korea, in 1989, and in Taiwan, in 1996 – and the related division of labor, it is worth taking a trip through the 100-year history of liquid crystals at Merck*. This is a success story of the world's oldest pharmaceutical and chemical company, which has grown into an international, listed company through the continual expansion of its global sales agencies, as well as its customer-oriented development and production activities on site.

Merck has Shaped Scientific Progress with Liquid Crystals for 100 Years*

The connection between the chemical composition and physical properties of substances was already thought to be understood, when the botanist Friedrich Reinitzer observed a new state of matter between solid and liquid in crystalline cholesteryl benzoate in 1888. Substances with a liquid crystal phase have the mechanical properties of a liquid and the optical properties of a crystal. The physicist Otto Lehmann studied them and named them liquid crystals. Searching for pure substances to obtain reproducible results, he turned to Merck, a company known for the guaranteed high purity of its products that was already selling liquid crystal substances in 1904. This research-driven, family-owned company helped him and his theory of a new state of matter to gain recognition in the scientific community. However: *"...these materials, whose production is costly and sales very low, would not be very profitable. We therefore manufactured them more as a favor."* – This was written by the head of the scientific laboratory at Merck in 1907, and so, as no technical applications could be found, the development of liquid crystals was laid to rest for a long time in the 1930s.

Renaissance of LC Research at the End of the 1960s

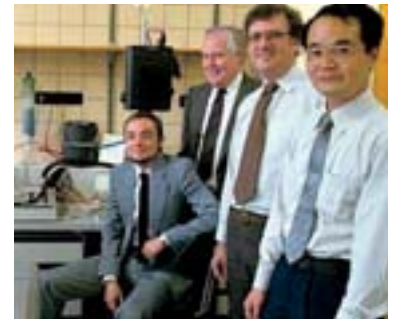
The incentive to recommence work in this field at Merck came from the United States at the end of the 1960s: The American researcher James Fergason wrote about the potential technical applications of liquid crystals. Merck researchers followed up these applications in analytical measuring technology, non-destructive materials testing, and as a diagnostics tool. A research report in 1967 stated: *"Since, to my knowledge, there is no other supplier of such compounds to date, it would be advantageous to try and be the first company to bring a range of liquid crystals onto the market."* In 1968, George Heilmeyer from Radio Corporation of America presented experts with a liquid crystal display, which, however, only operated at a temperature of about 80°C. Merck's Annual Report in 1969 documented the market launch of a new substance class: *"A further group of*

* "The History of the Future" is published in April 2004 and can be ordered via corpcom@merck.de.



1980

Merck invents the "viewing angle independent TN cell" (VIP display) and builds an application laboratory for liquid crystals in Atsugi, Japan.



Bernhard Scheuble, Jacob Fries, Frank Allan and the head of this laboratory, Kentaro Kawamoto, in Darmstadt in 1986.



1985

Merck patents "In-Plane Switching", a new technology for LCD monitors, together with Hitachi Ltd.



Kyoto Laureate Award for Advanced Technology, front row, second from left: Professor George W. Gray between Wolfgang Hönn and Michael Römer among other senior executives from Merck Darmstadt and Merck Ltd., as well as associate British scientists.



Tokyo, Japan | Employees from the Marketing and Sales department and Customer Services maintain direct contact with customers at all times. Japan has been one of the most important markets for liquid crystals for many years.

products bearing the trade name Licristal® consists of a number of substances and substance mixtures which may be employed as so-called liquid crystals. Although some of these compounds have been known for a long time, their application in special technical fields has recently gained interest.”

Quartz Watches and Pocket Calculators Establish Mass Market

People hearing the word “digital” at the beginning of the 1970s thought of digital watches “made in Japan” that initially showed the time via LEDs (Light Emitting Diodes) in an energy-guzzling red light. These were, however, very quickly superseded by the much more economical quartz watches with LCDs, which were based on TN cell (Twisted Nematic) technology. The first applications of this new technology included pocket calculators, which were also produced in their millions. Other small electronic devices were quick to follow as the still single-line alphanumeric displays were expanded. The Merck Annual Report in 1972 stated: “*Research in the sector of cholesteric and, more especially, nematic liquid crystals was intensified with the aim of providing the electronic industry with products suitable for the manufacture of alphanumeric displays. Contacts with our customers were enhanced by providing them with new methods of application and by closer cooperation with their respective scientific departments.*”

Merck Invents Technology for Color Displays and PC Monitors

Alphanumeric displays opened up a whole new dimension of visual information that led to the replacement of many mechanical display panels with flexible displays edited and controlled by computers – particularly in bus and rail transport. The viewing angle dependency of the contrast, however, initially prevented a rapid spread of this technology. In 1980, Merck invented the viewing angle independent TN cell (VIP display), the basis for all active matrix LCD flat screens. This paved the way for modern LCD technology, which was soon available in color. The 1982 Annual Report stated the following with regard to this development: “*The Merck Group is the world’s largest manufacturer of these versatile liquid crystals. Group companies working on research, development, and production in this field include E. Merck in Darmstadt and BDH Chemicals in Poole, England. Merck has several thousand individual compounds at its disposal today; hundreds of them are already in use. Consequently, both black-and-white and color displays and panels offering a substantial volume of data can now be produced.*”

Discover interactively
the secret of how a liquid crystal
monitor (LCD) works:
www.discover.merck.de



The successful digitalization of our world, that is, of information, was inevitable as the fax machine and the PC entered laboratories and offices – the first devices, of course, were accompanied by the bulky, hot, radiation-emitting cathode ray tube monitor. And, just as images were beginning to run on the monitor – in other words, just as processors were able to show rapidly changing images at still low resolutions, Merck’s liquid crystals were already in the first displays of the new notebooks, portable computers. In 1994, our sales of liquid crystals totaled over DM 100 million for the first time. The boom in notebooks and mobile telephones led in 1997 to the first leap in sales; two further leaps followed in 1999 and 2000, thanks to the hype surrounding the Internet and mobile phones. After a stagnation in 2001, sales increased again in 2002 by 37% due to the success of TFT LCDs in PC flat screens.

Merck: LC Market and Technology Leader

Part of Merck’s business strategy was to expand its core business with liquid crystals by additional components: In 1993, we began manufacturing ITO glass in Taiwan – glass coated with transparent, conductive layers of indium tin oxide (ITO). Since the mid-1990s, researchers at Merck’s plant in the United Kingdom have been developing polymer films to improve the optical properties of LCDs. Merck’s business is protected by more than 2,500 patents for liquid crystals, their mixtures and display applications. About 100 new patents are added to this portfolio every year. The future is secured in particular by our over 500 committed employees in this division worldwide, around one quarter of whom work in research and development. Whoever discovers the allure of a flat television screen tomorrow, will understand why – considering our investments in production and expertise – we are optimistic about the coming years.



1994



Construction of a coating plant in Taiwan for the manufacture of ITO glass – Nancy Yu from Merck Display Technologies inspecting display glass.



2003



LC researchers Matthias Bremer, Melanie Klasen-Memmer, and Kazuaki Tarumi at the award ceremony where they were presented the German Future Prize by the German Federal President, Johannes Rau.

The Executive Board of Merck KGaA

Confidence in a Competent Team |



Michael Becker



Michael Römer | Vice Chairman



Bernhard Scheuble | Chairman



Thomas Schreckenbach



Jan Sombroek

Bernhard Scheuble

Born in 1953, Ph.D. in physics from the University of Freiburg; with Merck for 22 years | Pharmaceuticals, Laboratory Distribution (VWR) | Law, Patents, Trademarks, Corporate Auditing, Corporate Development and Corporate Communications

Michael Römer

Born in 1946, Ph.D in chemistry from the Technical University of Darmstadt; with Merck for 26 years | Operations, Purchasing and Logistics, Health, Safety and Environmental Protection, Central Process Development Chemicals | Production plant in Germany

Michael Becker

Born in 1948, Ph.D in law from the University of Augsburg; with Merck for 5 years | Accounting and Controlling, Finance, Tax, Insurance | Europe, Middle East, Africa

Thomas Schreckenbach

Born in 1946, Ph.D. in biochemistry from the Ludwig Maximilian University, Munich; with Merck for 17 years | Chemicals | China, Japan, Korea, Singapore, Malaysia, Taiwan

Jan Sombroek

Born in 1947, Ph.D in chemistry from the University of Cologne; with Merck for 28 years | Human Resources, Information Services | Latin America, Australasia and some Asian countries

Merck KGaA | Management

Executive Board

Prof. Dr. Bernhard Scheuble, Chairman | Dr. Michael Römer, Vice Chairman
Dr. Michael Becker | Prof. Dr. Dr. h.c. Thomas Schreckenbach | Dr. Jan Sombroek
Matthew Emmens until February 18, 2003

Supervisory Board

Dr. Heinrich Hornef, Chairman until December 31, 2003, member until March 26, 2004 | Peter Zühlsdorff, Chairman from January 1, 2004 | Flavio Battisti*, Vice Chairman | Jon Baumhauer
Klaus Brauer* | Prof. Dr. Christoph Clemm | Claudia Flauaus* | Michael Fletterich* | Dr. Reinhart Freudenberg until March 26, 2004 | Dr. Michael Kasper* | Dr. Arend Oetker | Hans Schönhals* until March 28, 2003 | Osman Ulusoy* from April 2, 2003

* Employee representative

Overview of Divisions

Stability in Pharmaceuticals and Chemicals |

Divisions | Indications and Products

Pharmaceuticals Business Sector



Wiesbaden, Germany |

Dr. Jörg Spitz discusses treatments for thyroid diseases with our sales representative Anne Wörner at his outpatient practice in the city's hospital.

Ethicals

CardioMetabolic Care | Cardiovascular: Concor® product family; Type 2 diabetes: Glucophage® product family; Lipid disorders: Niaspan™ and Advicor™; Thyroid preparations: Euthyrox® ...

Oncology | Products and developing substances for treating cancer: Erbitux™ (colorectal cancer), Theratope® ...

Other Indication Areas | Products, e.g. Campral® (alcoholism), and developing substances, e.g. Sarizotan (Parkinson's disease) ...

Women's Health | Hormone replacement therapy: Luteryl®, Fem7® ...

Respiratory Diseases and Allergies | EpiPen®, DuoNeb® ...

Generics

Off-patent, low-price drugs

Consumer Health Care

Vitamins, minerals, supplements | Multibionta®, Cebion®, Bion®3 ...

Cold remedies | Nasivin® ...

Natural remedies | Seven Seas® ...

 Divisions | Products

Chemicals Business Sector



Savannah (GA), USA |

Padma Kaviratna, Pat Liloia and Jose Centeno testing an effect pigment. In our applications center in the Pigments division researchers look for new color and luster effects that enhance the appearance of many everyday objects.

Liquid Crystals

Components (LCs, ITO glass ...) for liquid crystal displays (LCDs) in monitors, notebooks, mobile phones ...

Electronic Chemicals

Process chemicals for chip manufacture, functional chemicals

Pigments

Effect pigments (Iriodin®, Colorstream®, Xirallie® ...), raw materials for cosmetics, vapor-deposition chemicals (Patinal® ...)

Analytics & Reagents

Reagents and test kits for the pharmaceutical, chemical and food industries, as well as for environmental analysis, e.g. for chromatography (Chromolith® ...)

Life Science Products

Products and services for the entire drug development process chain in the pharmaceutical and biotech industry

 Laboratory Distribution Business Sector

VWR International, Inc.

Distribution of laboratory chemicals and equipment in North America and Europe

The Merck Share

Strong Year-End Performance |

►
www.investors.merck.de

The Merck share's development was encouraging overall in 2003. It was listed at a price of EUR 33.03 on December 30 – up 30% on December 30, 2002. This positive trend was broken due to downturns in February and June. The marketing authorization of the cancer drug Erbitux™, which became increasingly likely over the course of the year, gave the share price a particular boost; however, liquid crystals also proved innovative. The termination of several diabetes development projects had a curbing effect.

In 2003, it was important for us that the share price would not remain at its issuing price of EUR 23.50. On August 1, the price had already increased to EUR 24.52; by September 1, it was EUR 28.20.

Investors generally want us to assist them with their stock valuations by providing early forecasts at the end of the year or even forecasts spanning several years. As a matter of principle, however, we do not want to raise expectations that we are unable to fulfill. For this reason, we will remain cautious with respect to predicting business development and will not publish any medium- or long-term projections. We again consulted with analysts and investors this year in many discussion rounds and at various events to improve their understanding of the complexity of our business and related standard procedures. For the purposes of greater transparency, we expand the notes contained in our external financial reporting on an ongoing basis. We also continually update and add to our Web site.

Earnings per share after tax and minority interest for fiscal year 2003 were EUR 1.15, compared to EUR 1.18 in 2002. We will propose to pay a dividend of EUR 0.80 at our Annual General Meeting on March 26, 2004. This would still keep the dividend yield on an attractive level. The distribution ratio (share of the theoretical total dividend payment – EUR 0.80 on each of 189 million theoretical shares – in earnings after tax and minority interest in 2003) is higher than our medium-term target.

It is our aim for the share price to reflect the company's true value and growth potential. This is still not the case, even after the price increase of the past few months. We therefore believe that our share still holds a lot of potential.

The Merck Share Compared to DAX/MDAX in 2003



Capital Increase Raises Stock Liquidity

Merck KGaA shares have been listed on the Frankfurt Stock Exchange since October 1995. Following the capital increase on July 24, 2003, the free float is 49,499,999 shares; the holding of the general partners represents 139,699,997 theoretical shares (further information on the total capital of Merck KGaA is provided on page 51). The average daily turnover during the year was 127,200 shares. We are conscious of the restrictions caused by the low liquidity of our stock. Around one third of our shares are held in the United States, while Germany and the United Kingdom each hold around one quarter. In Germany, almost 60% of our shares are held by private investors. In the United States and the United Kingdom, almost all shares are held by institutional investors.

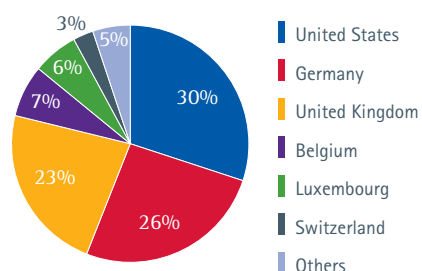
Share Data¹⁾

	2003	2002
Earnings per share after tax and minority interest in EUR	1.15	1.18
Dividend in EUR	0.80	1.00
Price-earnings ratio (Dec. 30)	28.72	21.53
High share price for the year in EUR	34.06	40.55
Low share price for the year in EUR	20.01	18.03
Year-end share price in EUR	33.03	25.40
Market capitalization in millions of EUR (Dec. 30)	6,249	4,369
Theoretical number ²⁾ of shares in millions (Dec. 30)	189.2	172.0
Actual number of shares in millions (Dec. 30)	49.5	45.0

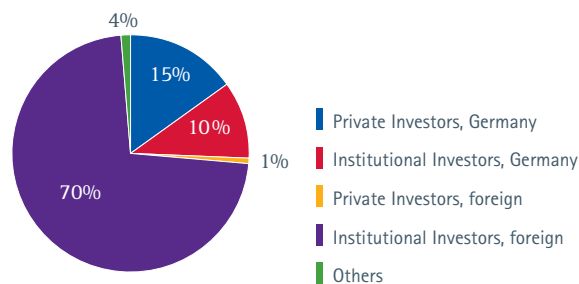
¹⁾ All figures relate to the closing price in XETRA trading on the Frankfurt Stock Exchange.

²⁾ The calculation of the theoretical number of shares is based on the fact that the general partner's equity capital is not represented by shares. Because the share capital of EUR 128.7 million is divided into 49.5 million shares, the corresponding calculation for the general partner's capital of EUR 363.2 million leads to 139.7 million theoretical shares.

Shareholder Structure by Country



Shareholder Structure by Investors



Management Report

Exploiting our Opportunities to Ensure Stable Growth

Macroeconomic Environment

Economic Recovery despite Persistently Weak Dollar

The global economic situation improved more quickly than expected over the course of 2003 after uncertainty during the Iraq conflict had declined in importance. The main driver of global recovery was the United States with growth of 3.1%, but Asian countries also recovered astonishingly fast from the SARS crisis and added momentum to the revival, not least because of the dynamic growth in China. According to calculations by the German Institute for Economic Research (DIW Berlin), economic growth was 2.0% worldwide – growth in the eurozone was only a mere 0.4%, although the European economy did experience a revival in the second half of the year.

One reason for the poor growth in Europe is the continual appreciation of the euro. The single currency was up around 20% on the previous year, and there is still no end in sight to the dollar's descent. The main sufferers are the export industries – especially the pharmaceutical and automotive industries. Added to this are a weak domestic market, the dependency on energy and raw materials imports, as well as a high rate of unemployment, which is also impacting the social security systems. Despite being guarantors of political stability, these systems are in need of reform throughout the EU. The German economy is now in its third year of stagnation in succession. Employment figures reflect economic development: In 2003, unemployment increased from 9.5% in the previous year to 10.3%. The forecast for 2004, according to the DIW and the German Council of Economic Experts, is a moderate increase in gross domestic product of 1.4%.

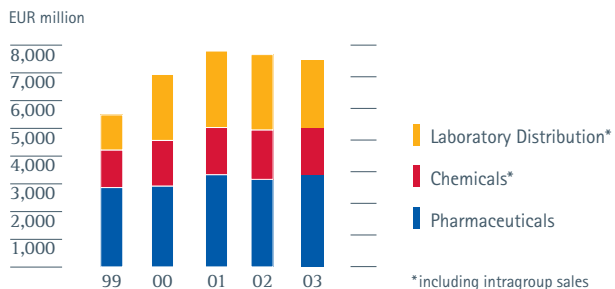
Business Development of the Merck Group

Committed to Sustainable Growth

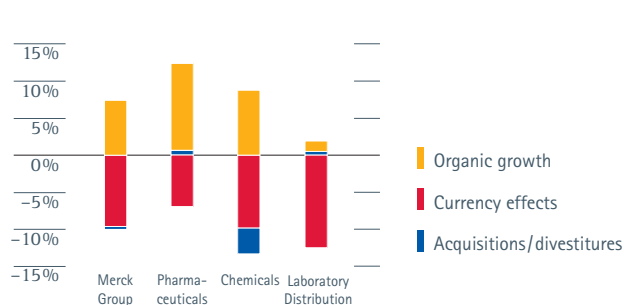
Given the current economic situation, the Merck Group's business development was encouraging overall. Sales – as anticipated – decreased nominally by 2.7% to EUR 7,202 million; however, after adjustments for negative currency effects and comparatively negligible effects of acquisitions and divestitures, sales were up 7.3%, thus exceeding our expectations. Unfavorable exchange rates, in particular the weak dollar and yen, had an adverse effect on all three business sectors.

Sales grew organically in all four quarters, compared with the respective quarters of 2002. Negative currency effects, which were significantly greater than those experienced the previous year – particu-

Sales by Business Sector



Sales Analysis



Components of Growth

Sales compared to previous year's quarters in %	Quarter 1	Quarter 2	Quarter 3	Quarter 4	2003	2002
Organic Growth	5.0	8.1	8.3	7.7	7.3*	5.0
Pharmaceuticals	5.8	17.2	14.6	7.4	11.1*	3.5
Chemicals	9.4	3.2	8.8	13.9	8.7	12.3
Laboratory Distribution	1.1	1.0	0.5	3.2	1.4	2.3
Currency effects	-11.5	-11.2	-7.8	-8.2	-9.7	-4.6
Acquisitions/divestitures	-0.2	-0.4	-0.3	-0.1	-0.3	-1.2
Total	-6.7	-3.5	0.2	-0.6	-2.7	-0.7

* Due to the reclassification of Generics sales, Pharmaceuticals sales in 2002 decreased (see page 28).

larly in the first two quarters – primarily led to a decline in nominal sales.

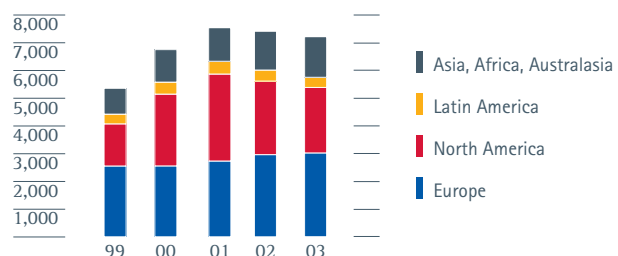
The increase in sales to EUR 3,303 million in the Pharmaceuticals business sector is mainly attributable to the Generics division, which successfully maintained its growth trend with an increase of 13%. In spite of generic competition for our best-selling drug, the antidiabetic agent Glucophage®, sales in the Ethicals division remained stable, while Consumer Health Care increased its sales by 3.8%. The Chemicals business sector recorded a 4.6% decline in sales to EUR 1,700 million as a result of strong currency effects; however, it achieved organic growth of 8.7%. With the exception of the Life Science Products division, all divisions contributed to this. Liquid Crystals was again the main contributor, increasing its sales organically by 31%, or by 16% in nominal terms. Sales of our Laboratory Distribution VWR International dropped 11% to EUR 2,427 million as a result of the substantial negative currency effects. There was a slight decrease in intragroup sales to EUR 228 million.

Regional Sales Development Influenced by Strong Euro

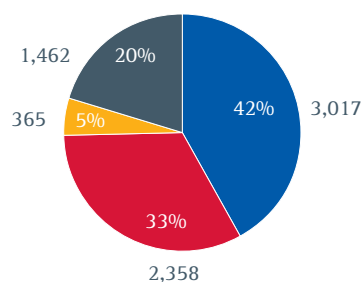
Europe accounts for 42% of sales and is thus the Merck Group's most important market. The sales increase of 2.0% to EUR 3,017 million was generated primarily in the EU, but we also increased our sales in Eastern Europe by 5.2%. Sales in France rose 5.6% to EUR 818 million; in Germany, sales increased by 2.4% to EUR 697 million. In **North America**, the weak dollar caused a decline in sales of 11% to EUR 2,358 million. In Canada, however, we achieved growth of 6.0%. Sales in this region account for 33% of Group sales and are generated primarily by Pharmaceuticals and Laboratory Distribution. As a result of strong currency effects, sales in **Latin America** dropped 8.4% to EUR 365 million, corresponding to a 5.1% share in Group sales. Although sales declined in our largest markets Mexico and Brazil, as well as in most of our smaller markets, there was a revival of growth in Argentina. In **Asia, Africa, and Australasia**, sales grew 4.8% to EUR 1,462 million. This increase was attributable in particular to strong growth of 45% in South Korea and 11% in Australia. Sales in this region accounted for 20% of Group sales.

Sales by Region

EUR million



2003



Pharmaceuticals Business Sector

Increase in Sales and Better Return

The International Pharmaceutical Market Continues to Grow

The key countries of the global pharmaceutical market recorded an increase in sales of around 8% in 2003 – a positive trend after 7% in 2002. The growth driver was again the North American market with an increase of 10%. The United States accounted for more than half of the 13 key pharmaceutical markets' sales totaling USD 310 billion. This market is still crucial to growth, since it is here that sales with profitable blockbusters (drugs with sales in excess of USD 1 billion) play a major role. However, generics are also finding their way into the American health system and curbing sales growth. Sales in the main European markets increased 6% after adjustment for currency effects. Above-average growth rates of 12% and 9% were achieved in Spain and the United Kingdom, respectively. The Japanese market – our second largest market after the United States – recorded slow growth of just 3% due to cost-cutting measures.

Generics Division Still Leading Growth Driver

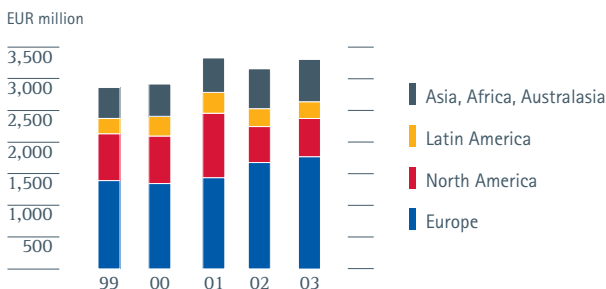
Our pharmaceutical business comprises prescription and patented drugs (**Ethicals** – e.g. for the treatment of cancer, cardiovascular diseases, metabolism disorders and respiratory diseases), prescription, off-patent products (**Generics**) and over-the-counter products (**Consumer Health Care**). With an increase in sales of 4.8% to EUR 3,303 million, sales growth in the Pharmaceuticals business sector was again on a par with previous years, following a decline in 2002 due to the loss of patent protection on the antidiabetic agent Glucophage®. Although acquisitions played a minor role, sales dropped substantially by EUR 218 million or 6.9% due to currency effects. The Pharmaceuticals business sector accounted for 46% of the Merck Group's total sales.

Pharmaceuticals | Key Figures

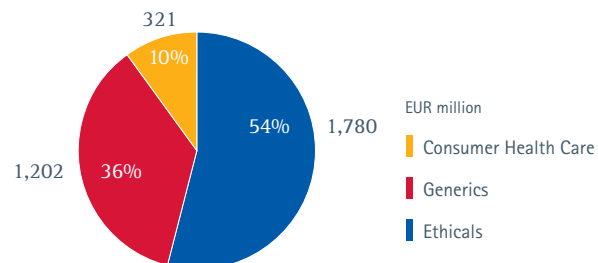
EUR million	2003	2002	Change in %	Share in %
Sales	3,303	3,153*	4.8	
Ethicals	1,780	1,779	0.0	54
Generics	1,202	1,064*	13.0	36
Consumer Health Care	321	309	3.8	10
Operating result	354	272	30.1	
Return on sales (ROS) in %	10.7	8.6*		
EBIT	157	272	-42.5	

► *Due to the adjustment of Generics sales, Pharmaceuticals sales in 2002 decreased (see page 28).

Pharmaceuticals | Regional Sales Development



Pharmaceuticals | Sales by Division





Quetta, Pakistan | In an analytical laboratory for quality control Ziviqar, Zartaj Awan, Charlotte Faria and Shazia Dilawar examine raw materials for use in drug production.

The operating result was EUR 354 million, a significant increase of 30% after the huge slump in licensing income for Glucophage® in 2002. Accordingly, the Pharmaceuticals business sector increased its Return on Sales (ROS) to 10.7% and its Return on Capital Employed (ROCE) to 12.4%; these key figures still fell short of our ambitious targets of 20%, but they were up more than 2% on the previous year. The Pharmaceuticals business sector accounted for 48% of the operating result. The high level of investment in our research activities and current product launches – the cancer drug Erbitux™ and the lipid modulator Niaspan™ – promise significantly greater profitability for our pharmaceutical business long term.

The **Ethicals** division was able to achieve a balance in sales and stagnated at EUR 1,780 million through life cycle management of the established drugs Glucophage® and Concor®, as well as through achievements in other indication areas. Currency effects concealed the organic growth of 8.1%. The **Generics** division was again particularly successful and achieved double-digit growth for the tenth year in a row; adjusted for currency effects, sales increased here by 17%; nominally, sales increased by 13% to EUR 1,202 million. The **Consumer Health Care** division recorded sales of EUR 321 million; negative currency effects cut growth from 8.2% to 3.8%.

With a 54% share of sales, we recorded year-on-year growth of 5.7% to EUR 1,771 million in our largest market **Europe**. After the effects of losing our exclusive rights to Glucophage® and overstocking on the part of our partner Bristol-Myers Squibb in 2002, we also achieved sales growth of 6.3% in **North America** in 2003 to EUR 602 million; adjusted for currency effects, the growth of our North American subsidiaries would be 24%. Sales in **Asia, Africa, and Australasia** increased by 6.0% to EUR 666 million. Our companies there were impacted by negative currency effects of –5.8%; in **Latin America**, these currency effects were –29% – accordingly, sales there fell 6.4% to EUR 264 million, in spite of favorable sales development.

ETHICALS Major New Product Launches Underway

The Ethicals division comprises our business with prescription drugs developed or in-licensed by Merck, focusing particularly on the therapeutic areas cancer, cardiovascular diseases, diabetes and thyroid disorders. The therapeutic areas respiratory diseases and women’s health are run by our independent subsidiaries Dey, in the United States, and Thérámex, in Monaco, respectively. With sales of EUR 1,780 million, the Ethicals division accounts for 54% of the Pharmaceuticals business sector’s total sales.

In **North America**, the positive development of Dey and the revival of sales for the Glucophage® franchise led to slight sales growth of 1.0%, despite strong currency effects. In **Latin America**, our subsidiaries achieved double-digit organic sales growth of 14%. However, due to negative currency effects, we suffered a decline in sales of 12%. Sales in **Europe**, on the other hand, increased by 2.7%. In **Asia, Africa, and Australasia**, sales decreased by 0.9% due to currency effects, although our subsidiaries there experienced organic growth of 14%.

Integration of Cardiovascular, Diabetes and Thyroid Business Segments to Form “CardioMetabolic Care”

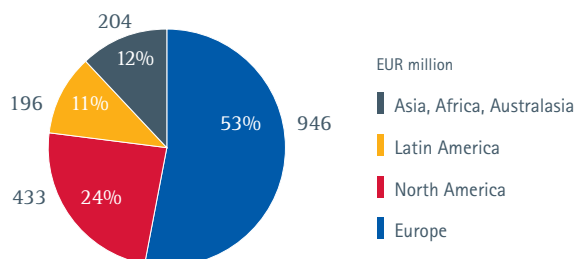
About one third of the Ethicals division’s sales was generated by the diabetes products of the Glucophage® family containing the active agent metformin and the Concor® family of the beta-blocker bisoprolol. These products generated sales of EUR 323 million and EUR 266 million, respectively. At the end of 2003, Merck combined the business segments Cardiovascular, Diabetes and Thyroid within the Ethicals division. There are several advantages to combining these activities, both from a business and medical point of view. For example, it will allow more sales synergies to be used in the future. Physicians are more often treating the so-called metabolic syndrome, which links diseases such as hypertension, lipid disorders and elevated blood glucose, with one integrated therapy. Scientific studies show that integrated treatment significantly reduces the risk of secondary diseases. Diabetes and cardiovascular diseases are both becoming increasingly more widespread worldwide.

Holistic Treatment for Diabetes and Cardiovascular Complaints

Despite current generic competition, the Glucophage® family of oral antidiabetic agents – still Merck’s top-selling product line – continued to collect 40% of all new metformin prescriptions in the United States. More than six million patients worldwide benefit from the products of the Glucophage® family. Following extremely low sales in 2002, as a result of market overstocking by our distribution partner Bristol-Myers Squibb, the Glucophage® family achieved a sales increase of 11% in 2003. Growth drivers were the enhanced preparations Glucovance®, a combination of metformin and glibenclamide, as well as Glucophage® XR, a once-a-day tablet. Glucophage® XR lost its patent protection in the United States market segment in October 2003; Glucovance® lost its protection in January 2004. Both products are increasingly being sold at a global level: Glucovance® now has marketing authorization in 44 countries worldwide and will be the growth driver for the diabetes business during the next four years.

► www.diabetes.merck.de

Ethicals | Sales by Region



Our launch of Glucovance® in Latin America was the most successful one in the oral antidiabetics market. Merck's activities continue to focus on treating type 2 diabetes. Most people diagnosed with type 2 diabetes are overweight with elevated cholesterol levels and high blood pressure, and must therefore also be treated for these conditions in addition to receiving treatment to reduce blood glucose.

The portfolio of the newly established CardioMetabolic Care unit also includes the Concor® family of the beta-blocker bisoprolol. Total bisoprolol sales increased 10%, while sales of packaged products increased by an impressive 13%. This sales growth is mainly attributable to our life-cycle management products – the low-dose combination preparation Lodoz® for treating hypertension, which increased its sales by 26%, and Concor®COR, for the treatment of chronic heart failure, which achieved sales growth of 46%. Merck offers nicorandil to treat stable angina pectoris; thanks to its proven cardioprotective effect, sales of this active substance increased by 24%.

► www.cardiovascular.merck.de



Semoy, France |

Laurence Bureau and Sylvie Zawojski test a blister packaging plant used in drug manufacture.



Lipid Modulator Niaspan™ Successfully Launched in the United Kingdom

The lipid modulator Niaspan™ is an ideal addition to the CardioMetabolic Care unit's product portfolio. This drug is the first nicotinic acid product to be approved in the United States for treating dyslipidemia. The product's market launch in the United Kingdom on November 5, 2003, marked the beginning of its European launch. Its global rollout is scheduled to occur during the next two years. The initial response has been very positive, since Niaspan™ is a new, once-a-day prolonged-release formulation and has a favorable side-effect profile. Compared to lipid lowering drugs, e.g. statins, which target "bad" LDL cholesterol, Niaspan™ stands out in particular due to its special ability to simultaneously increase "good" HDL cholesterol and reduce the level of "bad" cholesterol, LDL and triglycerides. Niaspan is primarily indicated in combination with statins.

► www.dyslipidemia.merck.de

In the United Kingdom, a marketing authorization application has been submitted for Advicor™, a Niaspan-lovastatin combination product. Advicor™ is the only U.S.-approved and patented combination drug for treating multiple lipid metabolism disorders.

Business with Thyroid Drugs Further Expanded

►
www.thyroid.merck.de

CardioMetabolic Care also includes our business with thyroid preparations, for which Merck is one of the leading suppliers worldwide. Sales of these products – in particular Euthyrox® – increased by 6.7% to EUR 92 million. Euthyrox® was launched successfully in Spain in 2003. More than six million patients worldwide use thyroid drugs from Merck. Hypothyroidism is still widespread worldwide. Only a fraction of these patients currently receive adequate treatment. Merck cooperates with the World Health Organization (WHO) to combat iodine-deficiency diseases.

Midrand, South Africa |

Sales representative Winie Sibiya advises Dr. M. Nhalapho and informs her about new drug therapy options.



Substantial Growth in Innovative Inhalation Therapy

►
www.respiratorydiseases.
merck.de

Our subsidiary Dey specializes in the development, manufacture, and sale of prescription drugs for treating selected respiratory diseases and allergies. With organic growth of 18%, Dey was again very successful in 2003. Sales decreased nominally to EUR 313 million, due to strong negative currency effects. DuoNeb®, the only US-approved, unit-dose inhalation solution for treating symptoms associated with chronic obstructive pulmonary disease (COPD), developed particularly well. Sales of DuoNeb® totaled EUR 129 million, corresponding to organic growth of 96% year-on-year. In October, Dey obtained a patent for DuoNeb® in the United States. Sales of EpiPen®, the life-saving adrenaline autoinjector for treating anaphylaxis, increased organically by 15% to EUR 97 million. Our patient-oriented advertising campaign in the United States – where advertising prescription drugs is permitted (direct-to-consumer advertising) – was a success.

Difficult Market Environment for Hormone Replacement Therapy

►
www.womenshealth.
merck.de

The women's health business is managed by our Monaco-based subsidiary Théramex. Our products for treating menopausal complaints suffered due to the publication of two studies (WHI – Women's Health Initiative, USA, and MWS – Million Women Study, United Kingdom), which questioned the use of hormone replacement therapy. Nevertheless, Théramex managed to increase its market share to 24% in its most important market, France. Global sales, however, decreased 7.2% to EUR 101 million. Our two new oral and transdermal combination preparations for hormone replacement therapy, Naemis® and Fem7 Conti®, are in the launching process after conclusion of the Mutual Recognition Procedures in July and December of 2003.

Research Expenditure Remains High

Following continuous increases in previous years, research expenditure in the Ethicals division remained stable at EUR 418 million in 2003, accounting for 24% of the division's sales.

The focus of our research is on drugs for which there is a high medical need. Our research pipeline has 16 promising substances in various phases of clinical development. We are concentrating on the therapeutic areas oncology and CardioMetabolic Care, including diabetes and cardiovascular diseases. We currently have eight projects in clinical development in our core business segment Oncology. Considerable financial resources are necessary for complete development and a quick time to market. As part of our strategy of increasingly using clinical development resources to strengthen our Oncology pipeline, we discontinued three diabetes projects with poor prospects at phase II of clinical development. This decision affects EML 16257, EML 16336 and IDD 676. However, we will continue our efforts to develop innovative treatments for diabetes in future. Our researchers in preclinical development are currently working on two new diabetes preparations.

Focusing on Innovative Treatments for Cancer

Cancer continues to claim too many lives and impact the quality of life of all those touched by such a diagnosis. While a cure for cancer remains elusive, progress is being made through therapeutic advances that aim to yield products with fewer side effects than the traditional cornerstones of standard treatment – surgery, radiotherapy and chemotherapy – so that patients are able to live better and longer. Both Merck and our U.S. subsidiary EMD Pharmaceuticals focus on novel targeted therapies that impact key biological processes so that people with cancer survive longer and have a better quality of life. We are committed to exploring these four areas: monoclonal antibodies that inhibit cancer growth; therapeutic cancer vaccines that mobilize the body's own immune defense system against the tumor; immunocytokines that target tumors and provide local stimulation of the immune system; and angiogenesis inhibitors that starve the tumor by cutting off its nutrient supply.

► www.oncology.merck.de

Erbitux™ for Colorectal Cancer Approved in Switzerland

New hope for cancer patients came in December 2003 with an accelerated marketing approval in Switzerland of Erbitux™ (cetuximab). This monoclonal antibody binds to the Epidermal Growth Factor Receptor (EGFR), blocking it and inhibiting tumor growth. EGFR is present on the cell surface of many types of cancer and is vital to the growth and spread of the tumor. This approval, the first marketing authorization for Erbitux™ in the world and the first marketing approval of an oncology compound for Merck, allows Erbitux™ to be used in combination with the chemotherapeutic agent irinotecan for treating patients with metastatic colorectal cancer. The approval was based on data from the European BOND study that was initiated by Merck and involved more than 300 patients with advanced, metastatic colorectal cancer. Data from the study were featured at the Annual Congress of the American Society of Clinical Oncology (ASCO) at the beginning of June, and the applications for marketing authorization were submitted in Switzerland and to the European Agency for the Evaluation of Medicinal Products (EMEA) in London at the end of June. Marketing authorization for Erbitux throughout Europe is expected by mid-2004.

Erbitux™ was licensed from ImClone Systems, Inc., New York, in 1998. While Merck holds the global rights outside of North America, ImClone and Bristol-Myers Squibb (BMS) hold the rights in North America. In Japan, Merck and ImClone/BMS share the development and commercialization rights. Investigators involved in conducting the clinical trials for Erbitux™ have stated that the availability of Erbitux™ marks the beginning of a new era in the treatment of metastatic colorectal cancer. Erbitux™ is also being studied in phase II/III trials for the treatment of head and neck cancer and non-small-cell lung cancer, both as a monotherapy and as part of combination therapy.



Darmstadt, Germany |

Melanie Kühnl and Deltlef Güssow from Preclinical Oncology Research compare diseased tumor tissue with healthy tissue using a GeneChip® machine.



Other Promising Cancer Therapies in Development

►
www.pipeline.merck.de

EMD 72000 is a humanized EGFR-specific monoclonal antibody that is currently undergoing clinical trials in several countries. The development program includes phase II clinical trials underway in Europe in patients with cervical cancer, and a phase I/II trial in patients with gastric cancer. In the United States, a phase II trial for patients with ovarian cancer opened in May. A phase I trial has been initiated in Japan to investigate the safety and tolerability of EMD 72000 in solid tumors.

Clinical investigations continued in the development of the therapeutic cancer vaccine Theratope® for the treatment of metastatic breast cancer, which Merck is developing in collaboration with Biomira, Inc., in Edmonton, Canada. In June the companies announced the results of the phase III trial: Only one prestratified subset of more than 300 women receiving Theratope® and concurrent hormone therapy appeared to show a favorable trend toward improvement in survival. Extensive analyses are currently being performed to better understand why Theratope® appears to have a positive impact on this subset of women. Data from an ongoing phase II trial may provide additional information.

In addition to the progress made with these high-priority development programs in 2003, Merck's oncology pipeline contains five other compounds in development. They include two additional therapeutic cancer vaccines: BEC-2 being studied in small cell lung cancer and BLP-25 liposomal vaccine (L-BLP-25) being studied in collaboration with Biomira in non-small cell lung cancer. The results of the L-BLP-25 trial are expected in the first half of 2004. Interest in the angiogenesis inhibitor cilengitide by the National Cancer Institute has resulted in an ongoing glioma phase I/II study in adults at the NCI. The immunocytokines EMD 273066 and EMD 273063 are undergoing phase I/II and phase I clinical trials, respectively, in several solid tumor types.

Merck invested approximately EUR 140 million in research and development for its oncology projects in 2003. We have obtained marketing authorization for our first oncology product in Switzerland and expect it to be approved in Europe in 2004. This is coupled with the steady, ongoing development of our other oncology compounds, all of which reinforces Merck's commitment to developing innovative, targeted cancer therapies.

Successful Developments in Other Indication Areas

The list of diseases for which Merck scientists are developing drugs goes beyond cancer, cardiovascular diseases and diabetes to include other, non-core indication areas where there is a high medical need. Although we do not focus directly on these compounds, they do add to the value of the pipeline through our own developments or partnerships. One example is Sarizotan, a compound being developed for therapy-related dyskinesia that can occur when treating Parkinson's disease. Sarizotan is a true therapeutic innovation. Phase II clinical study results are promising: Merck is therefore planning to bring this product to market in 2007. We are also looking for licensing partners for other drug candidates, including asimadoline, a substance aimed at combating pain associated with irritable bowel syndrome. We cooperate with partner companies in the United States and Japan as part of our global commercial strategy for the marketed product Campral® that is used to abate a pathologically increased craving for alcohol.

The results of phase IIB trials for the antidepressant Vilazodone presented at the beginning of 2003 do not support a progression of this substance to Phase III clinical trials. Our partner GlaxoSmithKline (GSK) returned the rights to Vilazodone to us, as foreseen in the licensing agreement. Merck is currently evaluating options for the further development of this substance.

Status of 16 Innovative Active Substances

Therapeutic Area	Active substance	Indication	Current Status ¹
Oncology	Erbix™ (cetuximab, C225; EGFR-specific monoclonal antibody ²)	EGFR-expressing tumors: colorectal, head & neck non-small-cell lung cancer	in approval ³
	Theratope® (cancer vaccine ⁴)	Metastatic breast cancer	Phase III
	BEC-2 (mitumomab; cancer vaccine ⁵)	Small-cell lung cancer	Phase III
	EMD 72000 (EGFR-specific monoclonal antibody)	EGFR-expressing tumors: gastric, cervical, ovarian	Phase I/II
	Cilengitide (EMD 121974; angiogenesis inhibitor)	Glioblastoma	Phase II
	EMD 273066 (huKS-IL2; immunocytokine)	EPCAM-expressing tumors	Phase I/II
	L-BLP-25 (liposomal cancer vaccine ⁴)	MUC1-expressing tumors: non-small-cell lung cancer, prostate	Phase II
	EMD 273063 (hu14.18-IL2; immunocytokine)	Melanoma, neuroblastoma	Phase I
CardioMetabolic Care and other indications	Niaspan™	Lipid disorders	in approval ⁶
	Advicor™	Lipid disorders	in approval ⁷
	Sarizotan	Dyskinesia in Parkinson's disease	Phase II
	EMR 62203 (PDE V inhibitor)	Male erectile dysfunction	Phase II
	EMR 62204 (oral NHE inhibitor)	Severe heart failure	Phase II
	Asimadoline (kappa agonist)	Irritable bowel syndrome	Phase II
	EMM 310066	Contraception	Phase II
	EMR 62218 (5HT2A antagonist)	Schizophrenia/Sleep disorders	Phase I

¹ Clinical status (for the most advanced indication)

² Developed together with Bristol-Myers Squibb and ImClone. Erbix is an ImClone Systems, Inc. brand

³ Approved in Switzerland in December 2003

⁴ Developed together with Biomira (Canada)

⁵ Developed together with ImClone

⁶ European mutual recognition procedure concluded in December 2003

⁷ Marketing authorization application submitted in the United Kingdom

EGFR = epidermal growth factor receptor | EPCAM = epithelial cell adhesion molecule | 5HT2A = serotonin receptor 2A | MUC = mucinous adenocarcinoma of the stomach | NHE = sodium-hydrogen exchanger | PDE V = phosphodiesterase V

GENERICS Growth Trend at Merck Generics Group Continues

► www.generics.merck.de

Following on from the successes of previous years, the Generics division's sales increased 13% in 2003 to EUR 1,202 million*. Organic growth was 17%. The Generics division accounted for 36% of total sales in the Pharmaceuticals business sector. The Merck Generics Group ranks among the top ten companies worldwide in this highly competitive market segment.

Strong Market Presence in Europe Bears Fruit

Approximately half of the group's sales were generated in **Europe**, increasing 13% during the year to EUR 586 million. Countries where the use of generics has recently been supported actively by government initiatives, in law or otherwise, helped to drive growth. Our French subsidiary increased its sales by 38%, thus France remains the division's most significant market in Europe. The Generics units in Italy and Belgium more than doubled their sales; growth was also encouraging in Portugal and Spain, where sales increased by 93% and 53%, respectively.

Sales in the United Kingdom declined by 24% due to exceptional sales in 2002, when our subsidiary Generics (UK) very successfully launched omeprazole well ahead of our competitors. Excluding the UK, sales growth of the Generics Group in Europe is 39% and thus significantly above the growth of the European generics market of around 25%.

Growth Rates in North and Latin America Over 20%

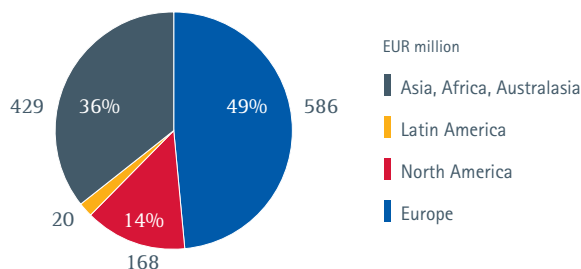
The Merck Generics Group also benefited from the positive market development in **North America**, increasing sales by 23% to EUR 168 million. License payments from KUDCo for the ulcer treatment drug omeprazole contributed significantly to operating results; however, growing competition continues to erode this revenue stream. Our Canadian subsidiary Genpharm strengthened its position in the market, increasing sales by 29% and launching a number of key products, such as simvastatin and paroxetine.

In **Latin America**, we generated sales of EUR 20 million, corresponding to growth of 36%. We were particularly successful in Mexico, where sales increased by 75%.

With sales of EUR 429 million, the region of **Asia, Africa and Australasia** is the group's second most important market. This region showed solid growth of 8.7%, led by our subsidiary Alphapharm, which further increased its market leadership in Australia with growth of 10%. Sales in Japan were flat as the integration of the Mohan acquisition was completed and improved cost structures were implemented.

► * In order to standardize accounting practices, certain customer-related expenses in the Generics division were deducted from sales in some countries in 2003 and no longer reported as marketing and selling expenses. Expenses totaling EUR 73.5 million were thus deducted from sales in 2002. This reclassification has no effect on the operating result or subsequent items in the income statement (see also page 77 of the explanatory notes to the consolidated financial statements)

Generics | Sales by Region



Generics Will Also be a Growth Segment in the Future

There is barely one government in industrialized countries that is not struggling with increasing healthcare costs as a result of demographic changes and medical progress. Cost-cutting measures are the order of the day and support the generics market segment both directly via generic substitution as stipulated by law, and indirectly via price regulations such as reference pricing. A number of major patent expiries, including blockbuster drugs with high sales volumes, offer good future development potential for the generics market.

Sales of generics are expected to increase from a market value of USD 29 billion in 2003 to USD 49 billion in 2007. Although the proportion of generics prescribed by doctors in the United States, the United Kingdom and Germany – the core markets for generics – is already extremely high, new markets with previously little generic substitution will play a crucial role in future growth. Countries in Southern and Eastern Europe, in particular the EU accession candidates, offer considerable growth opportunities, which the Merck Generics Group intends to exploit. The government in Japan – the second largest pharmaceutical market after the United States – recently began supporting generics. Merck will participate in the expected market growth there via its subsidiary Merck Hoei – already the fourth largest provider at present. It is our aim to become the leading generics provider in Japan.



Tokyo, Japan |

Akito Minegishi, a sales representative from Merck Hoei, and his colleague Shoichi Sasaki give advice to the Clinical Director Mituo Ogino. Merck Hoei is the fourth largest provider of generics in the growing Japanese market.



Creating and Increasing Value

In order to be competitive, we offer a broad range of generic drugs across all therapeutic areas. Licenses for almost 60 new formulations were obtained in 2003 and we plan for an additional 70 to be obtained in 2004. The Merck Generics Group will continue to expand its product portfolio through developments of its own and through alliances. Synergies with the Merck Group's business with patent-protected and prescription-only drugs allow an early market launch of substances after patent expiry – for example, the antidiabetic agent Glucophage® XR.

The portfolio focus remains on solid dosage forms; however, this will be complemented over the coming years by a selective move into more 'value added' products that provide greater margins. The recent completion, for example, of a special production facility for generic oncology products at Genpharm in Canada paves the way for the Merck Generics Group to increase its presence in this lucrative market segment in 2004.

We are expecting sustained strong growth in the future. In order to increase the critical mass in existing markets and enter new, interesting markets, we are planning further acquisitions. We are already one of the few truly global companies in this market segment today. Our goal is to become one of the three leading generics companies worldwide.

CONSUMER HEALTH CARE Strengthened International Market Position

► www.consumerhealthcare.merck.de

Sales in the Consumer Health Care division increased by 3.8% to EUR 321 million, thus accounting for 10% of the Pharmaceuticals business sector's total sales. Sales in our largest market **Europe** rose slightly by 1.5%. Our French subsidiary Merck Médication Familiale was particularly successful with sales growth of 22%. Sales with the probiotic vitamin preparation Bion[®]3, which was launched on the French market at the end of 2002, developed positively. Some of this growth is attributable to the acquisition of Laboratoires Richelet in July 2002. Sales in the Benelux countries, the Czech Republic and Hungary also developed favorably. In the United Kingdom, the second most important market in Europe, Merck acquired the British company Peter Black Direct Marketing Ltd. (now Lamberts Healthcare Ltd.), a direct marketer of vitamins, minerals and supplements, in 2003. Negative currency effects, however, led to a decline in sales by 2.9%. In Germany, our subsidiary Merck Selbstmedikation was faced with sales losses. Discussions on health policy, such as on the exclusion of cover for non-prescription drugs, caused a slump on the entire market.

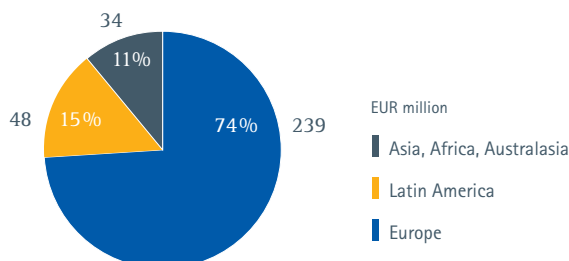
In spite of unfavorable currency effects, our sales in **Latin America** rose by 7.0%. We achieved strong growth in our largest market in Mexico with successful products such as our vitamin/mineral combination product Diabion[®], developed especially for diabetics, and the cold remedy Sedalmerck[®]. We also generated strong sales growth of 20% in the region of **Asia, Africa, and Australasia**, borne by our largest markets Indonesia, Malaysia and South Africa.

Research and Development for Innovative Dosage Forms

The Consumer Health Care division inaugurated an international research and development center in Darmstadt in April 2003, constituting an investment of around EUR 3 million. We will reinforce our commitment to our core business areas in future and develop more product innovations. In 2003 we generated 32% of our global sales with vitamins and minerals (e.g. Bion[®]3, Sangobion[®], Femibion[®], Cebion[®]), 20% with cold remedies (Nasivin[®], Sedalmerck[®]), 28% with preparations of plant and marine raw materials (Seven Seas[®]) and 20% with other over-the-counter products.

One example of the successful marketing strategy internationally is Bion[®]3, the world's first and, to date, only multivitamin tablet containing probiotic cultures. In France, a difficult market for vitamin products, this unique vitamin preparation won the confidence of physicians and made its mark in the pharmacy. The patented three-layer tablet containing probiotic cells is also a success in the United Kingdom: Four years after the product's launch there, where it is sold under the name Multibionta[®] Advanced Formula, it is the clear number two brand and close to becoming market leader in its segment. The preparation is now marketed in many countries. Merck will continue to develop this successful probiotic concept in future. The prospects for further organic growth within our Consumer Health Care division in the regions Latin America, Asia and Europe are good.

Consumer Health Care | Sales by Region



Chemicals Business Sector

Financial Targets Achieved due to Successful Liquid Crystals Business

Chemical Industry Slow to Recover

The slight economic recovery of the chemical industry at the beginning of 2003 was initially curbed in the middle of the year only to improve again by the end of the year. Factors such as the weak consumer demand and high crude oil prices impacted growth. With a market share of around one third, the European Union is the leading global manufacturer of chemical products. The strong euro put a check on the export industry there. Although the volume of chemicals being produced in Europe stagnated, sales increased slightly by 2.3%. The chemical business in the United States achieved an 8.2% increase in sales by increasing prices and maintaining a constant production level; its export business also benefited from the weak dollar. In Germany, chemical production was down slightly by 1.1%, while sales remained almost constant, increasing just 0.9%. In spite of the strong euro, foreign sales developed better than domestic sales. The dynamic growth of the markets in Central and Eastern Europe provides an opportunity for German exports to these regions. The prospects for 2004 are cautiously optimistic: a moderate improvement is expected.

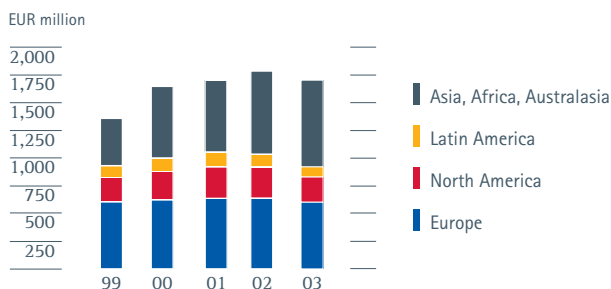
Profitable Products for Industries with a High Need for Innovation

The Chemicals business sector comprises the business of our five divisions with laboratory and industrial chemicals for high-tech scientific and technical applications: the Liquid Crystals division as the largest provider of liquid crystals for displays, Electronic Chemicals for process chemicals used in chip manufacture, and the Pigments division for effect pigments and specialty chemicals for the optics and cosmetic industry. The Analytics & Reagents division supplies reagents and test kits for analysis and chromatography in control and research laboratories, and the Life Science Products division supports the entire process chain of research-based pharmaceutical companies with a range of chemicals and services.

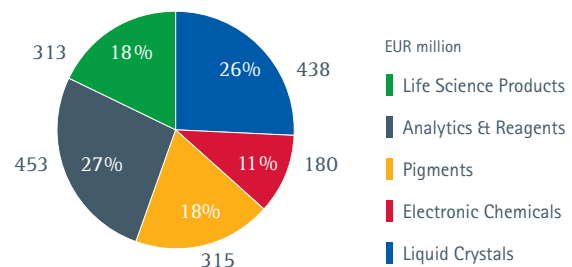
Chemicals | Key Figures

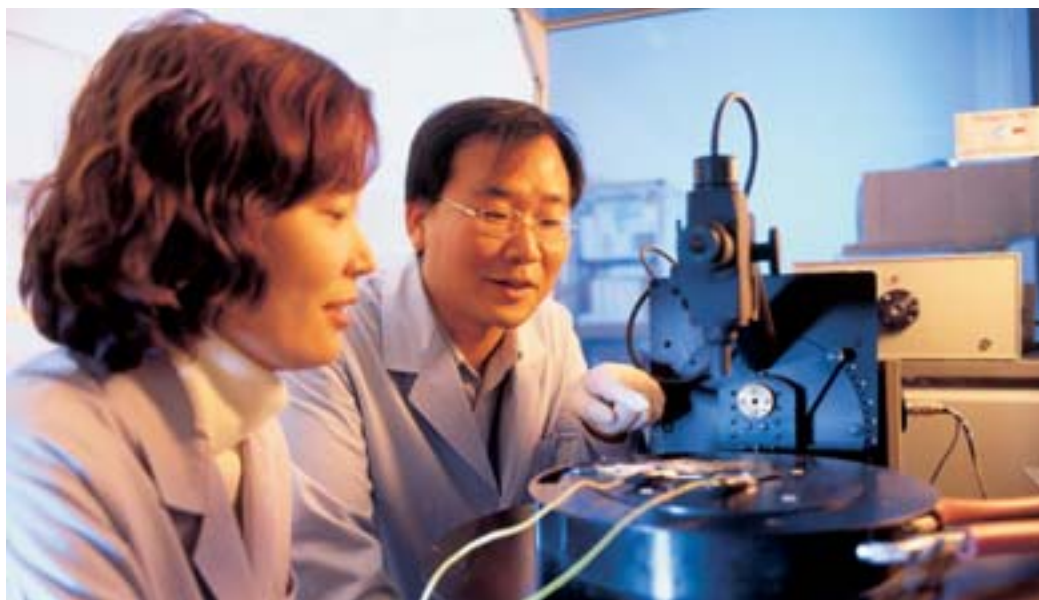
EUR million	2003	2002	Change in %	Share in %
Sales	1,700	1,782	-4.6	
Liquid Crystals	438	377	16.2	26
Electronic Chemicals	180	192	-6.0	11
Pigments	315	327	-3.7	18
Analytics & Reagents	453	504	-10.0	27
Life Science Products	313	382	-17.9	18
Operating result	302	260	16.4	
Return on sales (ROS) in %	17.8	14.6		
EBIT	302	208	45.2	

Chemicals | Regional Sales Development



Chemicals | Sales by Division





Gyeonggi-do, Korea | In the research center in Poseung Industrial Park Min-Ok Jin and Hee-Kyu Lee measure the electro-optical properties of test cells containing innovative liquid crystal mixtures.

Sales of the Chemicals business sector fell 4.6% to EUR 1,700 million. Organic growth was 8.7%. In addition to the withdrawal from certain businesses, company divestitures also lowered sales by 3.4%. Since Asia and the United States accounted for more than half of sales, negative currency effects of 9.9% led to a decline. The operating result increased by 16% to EUR 302 million. With a return on sales (ROS) of 17.8% and a return on capital employed (ROCE) of 15.2%, we exceeded our ambitious target of 15% for both these key figures. Excluding intragroup sales with our Laboratory Distribution company VWR, the Chemicals business sector contributed 21% to the Merck Group's total sales and maintained its 41% share in the operating result.

The **Liquid Crystals** division was again very successful, increasing its sales 16% – despite substantial negative currency effects – due to the huge demand for liquid crystal mixtures for large displays. Sales of **Electronic Chemicals** decreased by 6.0%, mainly as a result of currency effects, but also due to the strong price pressure in the semiconductor industry. In spite of encouraging organic growth, due in particular to good sales to the automotive industry, sales of the **Pigments** division fell 3.7% as a result of the weak dollar and yen. The 10% decline in the sales of our largest division, **Analytcs & Reagents**, is also attributable to exchange rates, but another contributing factor here was the divestiture of parts of businesses, which obscured steady increases, particularly in the area of food and environmental analysis. The **Life Science Products** division recorded the largest decline in sales of 18% - due, on the one hand, to currency effects and the phasing out of businesses, but also to the difficult market conditions with respect to contract manufacture for the pharmaceutical industry.

Sales in **Europe** decreased by 5.3% to EUR 602 million. While the 19% decline in sales in **North America** was essentially due to currency effects, divestitures played a key role in the 21% decline in **Latin America**. In spite of substantial negative currency effects, we achieved growth of 3.9% in **Asia, Africa, and Australasia**, in particular with Liquid Crystals; organic growth was 21%.

LIQUID CRYSTALS Growth of Technology and Market Leader Unstoppable

The record sales of the Liquid Crystals division in 2002 increased again by 16% to EUR 438 million; organic growth was 31% in 2003 after an outstanding 47% in 2002. This success story is described in our special feature on pages 4 to 11, which looks back on 100 years of liquid crystals at Merck. Merck is the global leader for liquid crystals (LCs) that are used in high-quality, flat-screen displays for PCs and televisions, notebooks, mobile telephones and many other applications. The mainstays of this positive sales trend were our liquid crystal mixtures for large TFT (Thin-Film Transistor) displays.

► www.liquidcrystals.merck.de

Our sales with ITO (Indium Tin Oxide) glass grew organically by 22%; color filter production facilities in Taiwan were utilized to full capacity. Substantial investment in research enabled us to continually expand our patent portfolio in LCD technology. A total investment of EUR 250 million in Darmstadt will enable us to double our production quantities and meet the anticipated future demand for LCs very cost-efficiently. We will continue to expand our strong position in the liquid crystals market and improve in the area of color filters and ITO glass for color displays.

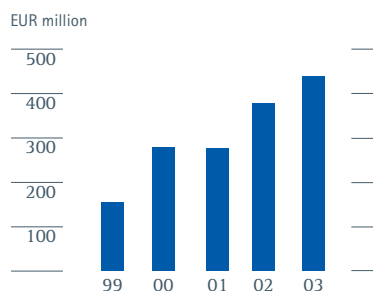
ELECTRONIC CHEMICALS Success with Process Chemicals

Merck supplies the semiconductor industry with a complete range of process chemicals and also offers chip manufacturers a variety of mainly analysis-related services. Sales of this division declined by 6.0% to EUR 180 million. After adjustment for currency effects, however, they increased by 4.9%; in our core business with ultrapure chemicals, sales increased by as much as 6.1%. Since January 1, 2003, the restructured Chemicals business has operated under the roof of Merck Electronic Chemicals Holding GmbH as a wholly owned subsidiary of Merck KGaA that combines our activities in Europe and Asia. It therefore has its own companies in Germany, France, Singapore, Taiwan and, from the beginning of 2004, in the growth market China. Our cooperation with Kanto in Taiwan within the joint venture Merck Kanto Advanced Chemicals ended on December 31, 2003. Merck Electronic Chemicals Holding GmbH acquired the shares in Kanto and will run the business itself in future.

► www.electronicchemicals.merck.de

Due to the closure of semiconductor factories with outdated technology and the shift of production to Asia, we recorded stagnated sales of EUR 71 million in **Europe**, corresponding to a 39% share in sales. In spite of an increase in volume, sales decreased in **Asia**. This region accounted for a 60% share of sales.

Liquid Crystals | Sales Development



The phasing out of our equipment business in Europe is going according to plan. Our core business with process chemicals reflects the positive economic development, particularly in the Far East. In order to keep up with the rapid growth in Asia, we invested EUR 7 million in the expansion of the distribution center in Taiwan and EUR 1 million in the expansion of the production facility in Singapore. The semiconductor industry is finding new areas of application, such as the use of process chemicals in the manufacture of flat screens. We are already involved in new technological developments, such as changing the conductor material in microchips from aluminum to copper, and are developing new products for this in cooperation with customers and research institutes in Taiwan and France. An increase in demand – particularly in Asia – leads us to expect steady volume growth overall in 2004.

PIGMENTS Xirallic® Effect Pigments for Automotive Paints Particularly Successful

▶ www.pigments.merck.de

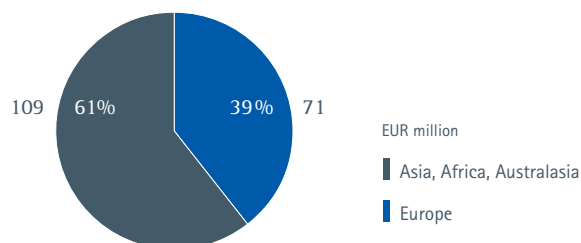
In spite of favorable business development – with organic growth in all five business segments – sales in the Pigments division declined by 3.7% to EUR 315 million. Excluding negative currency effects, organic growth amounted to a gratifying 6.6%. Substantial negative currency effects caused sales in **North America** to fall by 14%; sales also fell in **Asia, Africa, and Australasia** by 0.8%, and in **Latin America** by 18%. In our largest market **Europe**, however, we achieved an increase of 4.2%; in Germany, sales increased by an impressive 15%.

Sales with pigments used in **paint applications** developed particularly well, due primarily to the 65% increase in sales of our high-grade Xirallic® pigments. This innovation, which is currently enjoying a rapidly increasing demand in the automotive industry, gives automotive paints a distinctive crystal luster.

Sales in the **industrial pigment industry** – which is geared towards the printing and plastics industry – grew organically by 4.5%, since we increased in particular our sales with higher-grade pigments as a result of the demand for interference pigments with stronger color intensity.

High-grade, optically variable pigments from the Xirona® series were successful in the field of **cosmetic pigments**, especially in nail polish applications. Ronastar® pigments, the product class introduced at the end of the year, will give the cosmetic industry new sheen: These very thin, platelet-shaped and highly transparent pigments create a “radiant glitter effect”. In view of the cosmetic industry’s enthusiastic response to these pigments, we are expecting good sales in 2004.

Electronic Chemicals | Sales by Region





Onahama, Japan |

With pioneering spirit, a team developed innovative crystal-luster effect pigments. As a result of the high demand in the automotive industry, we commissioned a second production facility for Xirallic® in 2003. Masaaki Kamo and Mitsuteru Suzuki are shown here manufacturing these high-quality, aluminum oxide-based pigments..

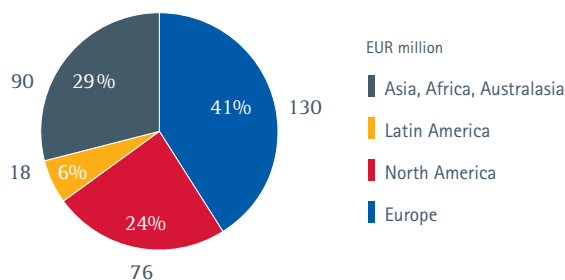


In the growth market for **cosmetic active ingredients** sales increased organically by 2.6%. The cosmetic industry was particularly interested in our microencapsulation technology, which we launched in 2002. This Merck innovation, which is marketed under the name Eusolex® UV Pearls, allows incompatible cosmetic constituents to be combined in a single end product. We want to expand our profitable business with the cosmetic industry through new developments from our materials research pipeline.

Sales of the **Optics** business segment increased organically by 22% and nominally by 9.2%. We are market leader for vapor-deposition chemicals for optical coatings (Patinal®) and were very successful with new applications in the near-UV range. The high-tech optics used in the rapidly growing DVD sector, as well as in mobile phones with an integrated camera, video projectors and other consumer goods, lead us to anticipate positive business development in the future.

The Pigments division has a good research team with several promising new technology and product developments.

Pigments | Sales by Region



ANALYTICS & REAGENTS Laboratory Reagents Increase Market Share

▶ www.reagents.merck.de

The largest division of the Chemicals business sector achieved organic growth of 4.5%. Due to portfolio streamlining and currency effects, sales declined 10% to EUR 453 million. We achieved one-digit organic growth in our largest market **Europe**, primarily due to the dynamic growth in Eastern Europe. In **Asia, Africa, and Australasia** we recorded a one-digit increase in organic sales; in **Latin America**, we achieved double-digit organic growth. Sales in **North America** stagnated; here, as in the latter two regions mentioned above, currency effects caused a double-digit decline.

Overall, sales in this division developed better than the market. Business with organic reagents and customer-specific preparations was particularly encouraging, as was business with test kits and test assays in all fields of industrial microbiology and food and environmental analysis. Worth particular mention is also the outstanding development of the fastest chromatographic separation column in the world: Chromolith® again performed better than the chromatography market as a whole, achieving a double-digit increase in sales.

Bangkok, Thailand |

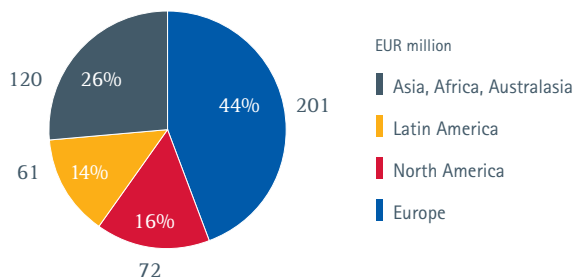
Customer advisor Songsuda Poolpho discusses new customer retention strategies with Pongsan Ekpothomsak from the Analytics & Reagents division and Ladawan Feangfung from the Finance department.



Adjusted for currency effects, the largest business segment, **Reagents & Chemicals**, grew 3.9%: Merck is the global leader for analytical reagents in the pharmaceutical, chemical and food industry. Our key product lines here are high-purity inorganic reagents for trace analysis, solvents for chromatography, as well as organic chemicals for production.

In 2003, we withdrew from businesses that are not part of our core activities and streamlined our product portfolio to include higher-value products. We will generate favorable increases in sales with our own sales organizations in Eastern Europe and China. In view of the homogenous and continuous growth trend across a wide range of products and several promising new developments in rapid food tests, we are also expecting satisfactory sales growth in 2004.

Analytics & Reagents | Sales by Region



LIFE SCIENCE PRODUCTS Growth Retarded by Portfolio Streamlining and Difficult Pharmaceutical Environment

Sales in the Life Science Products division decreased 18% to EUR 313 million, primarily as a result of portfolio streamlining and currency effects. Sales in our largest market **Europe** declined 15%, due, among other things, to our withdrawal from the vitamin business and the divestiture of Nutriblend. Our subsidiaries in **North America** achieved organic growth of 3.3%; an impressive 27% was achieved in **Latin America**. However, negative currency effects led to nominal decreases in sales of over 15% in both these regions, as was also the case in the stagnating business in **Asia**.

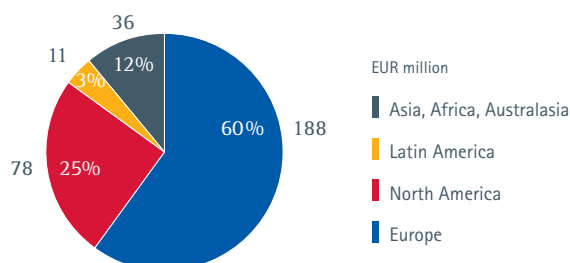
The Life Science Products division supports the entire value chain of research-based pharmaceutical and biotechnology companies (Life Sciences), providing them with a complete range of products and services. Our **Bioscience** business area grew organically by 6.0%, particularly because our U.S. subsidiary EMD Biosciences was again successful. The acquisition of the U.S. proteomics company, Proteo-plex, in St. Louis, Missouri, enables us to offer biomedical and gene technology research more products for the fields of gene expression, protein expression and so-called cell-based assays, and to expand our own functional genome and proteome research programs.

Our **Processing** business segment, which offers products for the manufacture and purification of pharmaceutical active substances on a biotechnological basis, grew organically by 7.5%. Sales in our **Formulation** business segment decreased due to the streamlining of our portfolio of pharmaceutical active substances, from which biotin was removed, for example.

Although the pharmaceutical industry was using its own production capacities, due to a lack of new drug approvals, and these facilities were not being utilized to full capacity, our **Custom Synthesis** business grew organically by 7.3%. In future, we would like to benefit more from orders from start-up companies – particularly in the United States – that we can assist as an experienced partner throughout the process chain in accordance with the regulations. The growing processing market, in particular, holds further potential. Here, we offer new purification methods, e.g. for monoclonal antibodies, the pillars of hope in oncology. In addition, Merck made the largest investment in its history at its Darmstadt site and laid the foundations for an efficient production facility for organic synthesis: Aside from the Liquid Crystals division, customers of the Life Science Products division also benefit from this, as the facility enables cost-effective manufacture of intermediate and end products of the pharmaceutical industry.

► www.lifescienceproducts.merck.de

Life Science Products | Sales by Region



Laboratory Distribution Business Sector

Growth in all Markets due to Better Return on Sales

▶
www.vwr.com

The Laboratory Distribution business sector was established in 1999 through the merger of the European distribution companies into the Merck Eurolab Group and the acquisition of the remaining shares of the U.S. laboratory distributor VWR. Today, all global transactions are carried out under the roof of our wholly-owned U.S. subsidiary VWR International, Inc., which has its headquarters in West Chester, near Philadelphia, USA. Laboratory Distribution's sales declined by 10% to EUR 2,427 million; adjusted for currency effects, an increase of 1.4% was achieved, despite the difficult environment. The operating result decreased by 6.1% to EUR 79 million. Free cash flow increased by 55% to EUR 126 million. Return on sales (ROS) rose to 3.3%, compared with 3.1% the previous year; ROCE increased to 6.4%. The Laboratory Distribution business sector accounted for 33% of the Merck Group's total sales, but only 11% of its operating result.

Laboratory Distribution | Key Figures

EUR million	2003	2002	Change in %
Sales	2,427	2,711	-10.5 %
Operating result	79	84	-6.1%
Return on sales	3.3%	3.1 %	
EBIT	79	79	0.3 %

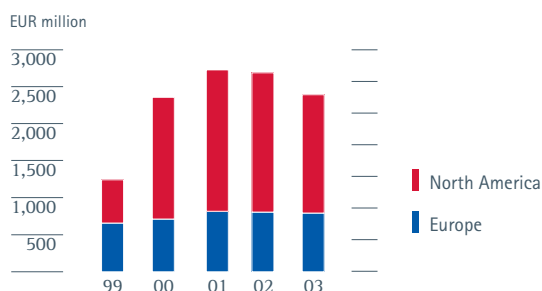
Strong Euro Impacts this Transatlantic Business

Two thirds of total sales were generated in North America and one third by our subsidiaries in Europe. Our presence in both regions gives us a significant competitive advantage, but VWR recorded a 15% decline in sales in North America due to currency effects. Organic growth there was 1.9%, while the European organization grew organically by 0.3%. In January 2003, VWR acquired the laboratory distribution business in Mexico from Merck and founded the company VWR International S. de R. L. de C.V. in Mexico City. In October 2003, VWR opened a new facility in Ireland to provide our customers in this key market with greater efficiency.

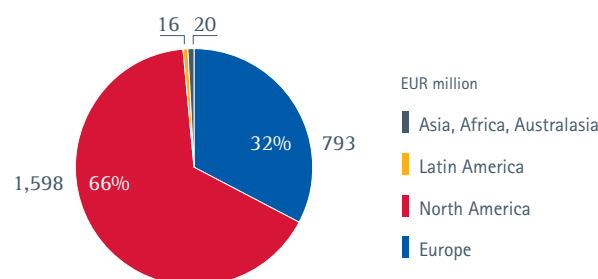
Position Expanded in Difficult Market Environment

VWR International is the only laboratory distribution organization in the world that offers a full range of products and services on a transatlantic platform. Its key customers include the pharmaceutical industry, companies in the life sciences sector, the chemical and technical industry, as well as the food processing and consumer goods industries. Universities, research institutes, state institutions, environmental laboratories, and schools are also part of the company's customer base.

Laboratory Distribution | Sales Development



Laboratory Distribution | Regional Sales



West Chester, USA |

Even in e-business, committed employees are the most important link in the laboratory distribution chain – Steven Slaughter, Kelly Brodzik and Rich Peirce ensure punctual delivery.



The 2003 performance was affected by continued spending constraints in the pharmaceutical, biotech, electronic and science education markets in the United States. In spite of this difficult environment, VWR expanded its strong market position for scientific laboratory products. This expansion is mainly attributable to the company's broad customer base, which comprises more than 250,000 customers, as well as the range of more than 750,000 products from more than 5,000 manufacturers that are geared to these customers' needs.

E-Commerce is More Than Just a Buzzword for VWR

The continuing success of VWR is primarily due to 5,881 employees in 18 countries, of whom more than 3,000 work in the United States. A crucial factor in this success is the fast, cost-efficient processing of customer queries and orders using sophisticated e-business solutions. The implementation of the new Customer Contact Center technology platform was concluded in 2003. This platform enables VWR call center employees to quickly and reliably resolve a customer query with one single phone call. It is, of course, also possible to place orders conveniently online: In addition to their high level of functionality, these Internet portals are available in the respective languages of the countries where VWR is represented – there are currently 11 language versions available – and they feature country-specific content. All these Web sites offer specific search options, comprehensive order documentation and a reliable costing system.

In 2003, VWR launched a series of new, advanced e-business solutions: These include VWR Connect – VWR's own procurement solution for its customers – an oligonucleotide ordering wizard, as well as many other Web site enhancements. VWR also has sophisticated business-to-business (B2B) solutions that connect seamlessly to standard purchasing portals and customer-specific procurement systems. VWR is a leader in the implementation and integration of such solutions in customer systems that have a local ordering system or internal budgeting, etc. More than 40% of all U.S. order transactions are processed via e-business channels; in Europe, 21% of orders are processed in this way. In line with the principle of "one-stop shopping", the Internet is becoming an increasingly important sales channel, in which VWR is continually investing.

Prepared for Expected Market Recovery

The company expects a recovery in its traditional markets and increased spending on drug development in 2004, since these are essential to the long-term survival of pharmaceutical companies. Possibilities for expansion into new countries and market segments are also being pursued to increase competitiveness.

Investments in Research and Property, Plant, and Equipment

Securing the Future at a High Level

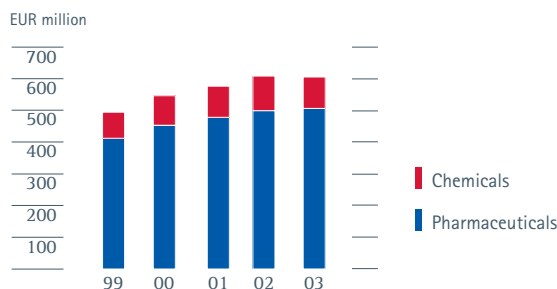
Research-Spending Ratio Remains High

Our research and development expenditure, which has been substantial for a number of years, was kept on the previous year's level at EUR 605 million. The research-spending ratio – defined as the relation between research expenditure and sales less our Laboratory Distribution business, VWR International – remained at 13%. Around one half of research funding was invested in our research and development site in Darmstadt, Germany. Darmstadt is home to our main facilities, in particular the complete infrastructure for preclinical and clinical development, as well as many other departments necessary for researching a drug, including the Regulatory Affairs and Patents departments. Other major competence centers are located in Lyon and Chilly-Mazarin (France), Aberdeen (United Kingdom), Barcelona (Spain) and Billerica, near Boston, Massachusetts (United States). The most important chemical research locations besides Darmstadt are headquartered in Southampton (United Kingdom), San Diego (United States), Gyonggi-do (Korea), Taoyuan (Taiwan) and Onahama and Atsugi (both in Japan).

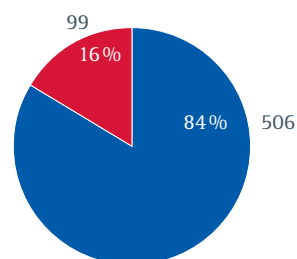
Totalling EUR 506 million, **Pharmaceuticals'** share of the Group's total research expenditure increased to about 84%. Based on the sector's sales, the research-spending ratio was 15%. In the particularly research-intensive Ethicals division, the research-spending ratio was as much as 24%, with expenditure of EUR 418 million. Our strong commitment to research and development primarily focuses on driving forward our projects in the therapeutic area Oncology. We also research the indications diabetes and cardiovascular disorders within our CardioMetabolic Care business area. The Generics division spent EUR 79 million – 15% more than in 2002 – on the development and marketing authorization of generic active substances offering added value, for example through innovative dosage forms. The Consumer Health Care division increased its spending on the development of new products by 23% to EUR 8 million. This considerable increase is due in particular to our investment in a research and development center in Darmstadt. This center has been developing high-quality, non-prescription drugs, such as innovative pharmaceutical formulations, since April 2003.

We decreased our spending in the **Chemicals** business sector by 9.8% to EUR 99 million. Research expenditure in the Liquid Crystals division declined by 10% to EUR 30 million, settling at a high level after an increase of 48% in 2002. This successful business focuses on meeting the changing demands on our liquid crystal mixtures for use in displays for large television sets, PC monitors, projection systems, etc. Our research and development activities also extend to color filters and glass. R & D expenditure in the Electronic Chemicals division was EUR 5 million. Our research activities in the Pigments division, on which we spent EUR 27 million, focus on novel color and luster effects for attractive pigments, as well as a range of promising projects for the technical industry. The Analytics & Reagents division spent EUR 10 million on R & D – the same as in the previous year; the Life Science Products division reduced its spending to EUR 18 million. Further information on R & D can be found in the section on the individual divisions starting on page 22.

Research and Development by Business Sector



2003



Investments in Property, Plant, and Equipment Reduced

After years of excessively high rates of up to 8% – as a result of large-scale projects – we reduced our investments in property, plant, and equipment to EUR 281 million or around 4% of sales. We therefore achieved our savings target for 2003. The main focus of our investments in 2003 was again on Germany, North America and Asia, where the modernization and expansion of facilities secure our future growth potential.



Barcelona, Spain |

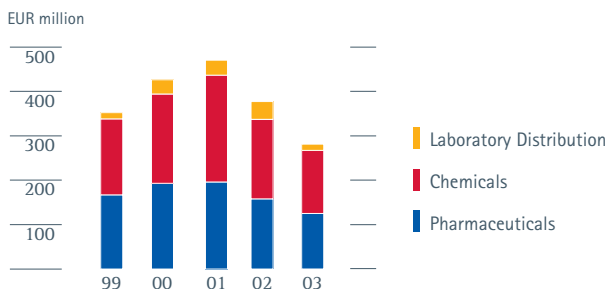
Antoni Coll and Helena Eixarch work in cancer research and extract proteins from tumor tissue.



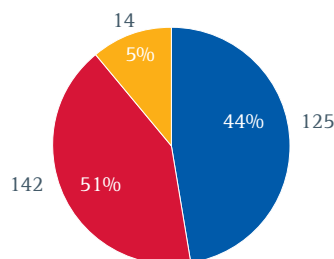
The **Pharmaceuticals** business sector invested EUR 125 million worldwide. One focal point in Ethicals, besides other measures, was the modernization of the filling plants in Darmstadt and new packing facilities for DuoNeb® at Dey in the United States. We have postponed the construction of our own protein production plant in favor of outsourcing. The rapidly growing Generics division invested in the expansion of its development and production capacities at its subsidiaries Alphapharm in Australia, Genpharm in Canada, McDermott in Ireland, and Merck Génériques in France.

The **Chemicals** business sector accounted for EUR 142 million of global investment in property, plant, and equipment. As in previous years, the focus was on modernizing the production of organic chemicals in Darmstadt, which will enable a significant expansion of liquid crystal production over the coming years: A total investment of around EUR 250 million will be used to double the synthesis capacities for individual substances; mixture production in Asia was also further expanded. In November, we began manufacturing special color filters for displays in Taiwan, where a second plant is already under construction. This is part of Merck's strategy of expanding its share in the rapidly growing display market beyond liquid crystals and ITO glass to other components. The investments in effect pigment production facilities in Gernsheim and Onahama were concluded. **VWR International** invested around EUR 14 million in the improvement of its IT service structures for laboratory distribution.

Investments in Property, Plant, and Equipment



2003



Central Functions

Extensive Support for Global Business Operations

Successful Capital Increase

By way of a private placement in July 2003, Merck issued 4,499,999 new shares to institutional investors. The market embraced this capital increase very quickly. As of the same date, the company's general partner E. Merck OHG, which focuses on the interests of the Merck family, increased its equity interest by the same proportion. The company's total capital increased to EUR 492 million. The capital increase strengthens our equity base; it also enabled us to reduce our financial obligations and at the same time increase our entrepreneurial scope.

Rating Facilitates Capital Market Entry

In September 2003 Merck received investment-grade ratings from the two leading international rating agencies, Moody's and Standard & Poor's (S&P). Our creditworthiness was rated "Baa2" by Moody's and "BBB" by S&P. Both agencies stated that Merck's outlook is "stable". These ratings give us better access to the debt-capital markets.

Significant Expansion of Merck Group's Strategic Purchasing

We integrated our U.S. companies in the strategic purchasing program in 2003, thus completing the global launch of this program. In a total of 30 projects, employees in the purchasing networks achieved cost benefits of around EUR 40 million, most of which benefited the Pharmaceuticals business sector. The Chemicals divisions – particularly at our Darmstadt and Gernsheim plants – profited from 7% lower raw materials prices and 1.5% lower cost prices for packaging materials.

We reduced the costs of purchasing industrial goods for our largest production plant, Darmstadt, by an average of around 15% of total project costs. In 2004, we hope that our strategic sourcing programs will help us achieve cost benefits of EUR 43 million in the procurement of raw materials and packaging materials for production, consumables, industrial goods, and a broad range of services.

Modified Global Environmental and Safety Targets

As in the previous year, expenses for environmental protection and safety equipment amounted to around EUR 95 million in 2003. We have set new global targets for health, safety and the environment, which are covered in the report "Responsibility for Employees, the Environment, and the Community", published in 2003. This report can also be viewed online at www.responsibility.merck.de. Progress in these areas is documented by a new, global database. In addition to the ongoing certification of our plants in accordance with ISO 14001, special safety audits are also playing an increasingly important role for us due to current world politics. In view of the new, general legal conditions, Merck is preparing itself for both the possible implementation of EU chemical law and the introduction of CO₂ emissions trading from 2005. The gas and steam power plant commissioned in 2002 enabled our Darmstadt site to further reduce its CO₂ emissions significantly.

►
www.responsibility.
merck.de

IT Projects Improve Transparency and Efficiency Worldwide

We reduced the costs of our centrally coordinated IT projects by 6.1% to EUR 200 million. Aside from improvements in efficiency, better contracts for external data transfer also contributed to this: We saved more than EUR 1 million. One focus of our projects is to provide all Merck Group employees with rapid access to our information systems – which are upgraded on an ongoing basis – for a growing number of international business processes. We have, for example, changed additional companies in Asia over to the standard company software with a view to harmonizing these systems. We have also made further progress in terms of the network security of our Internet-based server access. Merck exploits its many opportunities to increase efficiency through innovative management: At our Darmstadt site, we

introduced a system for clear package identification. This Handling Unit Management system improves transparency and throughput time, and reduces the number of errors. In an international pilot project, we are using portal technology to enable our companies' logistics departments to accurately trace the movements of goods and therefore further improve procurement processes.

Our preclinical biological and chemical IT department operates a computer cluster comprising 140 computers. This uses virtual screening to examine chemical structures to see how they would potentially bind to biological targets. This method of searching for active agents allows us to cost-effectively test substances that we have not yet synthesized ourselves, such as substances from external databases.

Seoul, Korea |

Claus Kreuzer and Daniele Bruns from Corporate Communications inform their Korean colleagues about brand strategy and brand values as part of the Corporate Identity Project.



International Communication Platforms Established

The process to strengthen the corporate brand reached another milestone in 2003: The new logo provides all regional companies operating under the names Merck or EMD with a common symbol. An international communicator network was set up in 2003 to help achieve a common identity. Good international cooperation enabled us to quickly and simultaneously inform our employees, the media, analysts, and the general public about the launches of Erbitux™ and Niaspan™. The company Web site at www.merck.de, which is largely in four languages, and our corporate intranet, MerckNet, were further expanded. We combined our employee publications in 2003 and launched an international employee magazine "pro", which is published ten times a year in four languages. Our internal communications thus also employ the concept of "one company – one voice".

Stable Number of Employees – Responsible Solutions for Structural Changes

The Merck Group has 197 companies in 53 countries; we are represented in 28 countries via 63 production sites. A total of 34,206 employees worldwide contributed to our entrepreneurial success and to securing the company's future. The number of employees has thus remained almost constant over the past five years. Although we took on new employees in our Generics division, particularly in Canada and Australia, we had to close a pharmaceutical production plant in India (Taloja, near Mumbai) to increase efficiency. Socially acceptable solutions were found for the affected employees there.

9,600 employees work in Germany – most divisions and central services are managed by the company's headquarters in Darmstadt. In terms of function, 10% of these employees work in research, 25% in production, 35% in sales and marketing, while the remainder are spread among central functions, such as human resources, finance and accounting, technical operations and IT.

Progress in International Harmonization

Our high standards for the responsible handling of employees were published for the first time for the entire Merck Group in July 2003 in the international report "Responsibility for Employees, the Environment, and the Community". This report documents many examples of our corporate and ethical responsibilities in areas such as educating young people, further training, social security, as well as our commitment to the community.

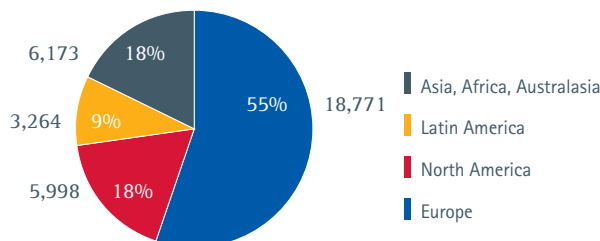
Darmstadt, Germany |

Team spirit in global networks: Emad Graiss from Saudi Arabia, Jae-Yeoul Lee from Korea, Antonio Moraes from Brazil, Carlos Garcia from Argentina, Heike Petri from Germany and Tom Song from China took part in the International Management Programme (IMP) in 2003.



A major strategic goal of the Merck Group is the internationalization of human resource management, focusing on global senior management development. This includes the "Top Talent Pool" for succession planning and the successive introduction of standard principles for setting targets, performance evaluation and performance bonuses. Human resources functions will be networked both regionally and within the business sectors and divisions, in order to effectively support senior managers and employees. The development and qualification of as many employees as possible is a primary concern for our long-term success.

**Number of Employees
as of Dec. 31, 2003**



Result and Balance Sheet of the Merck Group

Double-Digit Return on Sales and Return on Capital Employed

The **Merck Group's** operating result was up 19% on the previous year to EUR 736 million. This increase is all the more remarkable, since this result would have been EUR 64 million higher had it not been for currency effects (translation). Acquisitions and divestitures also had an adverse effect overall of EUR 13 million. Return on sales (ROS) increased from 8.3%* to 10.2%. Return on capital employed (ROCE) rose from 9.6% to 12.1%.

The **Pharmaceuticals** business sector increased its operating result by a substantial 30% – or 40% when adjusted for currency and acquisition effects – to EUR 354 million. In the Ethicals division, several European countries recorded good increases in their results; our U.S. subsidiary Dey also had an excellent year. In spite of generic competition, the sales of our antidiabetic agent Glucophage® developed well. Our Generics division was again very successful: In addition to a favorable business performance, the division also received substantial payments from Schwarz Pharma for sales of the omeprazole generic. Our Consumer Health Care division also recorded a significant increase in its operating result. Return on sales in the Pharmaceuticals business sector increased year-on-year from 8.6%* to 10.7% in 2003. Return on capital employed rose from 9.4% to 12.4%.

The operating result of our **Chemicals** business sector increased by 16% to EUR 302 million. Once again our Liquid Crystals division was the main driver of this positive development, while the contributions of the other divisions were either down or unchanged. Return on sales of this business sector increased from 14.6% in 2002 to 17.8%, clearly exceeding the long-term target of 15%. Return on capital employed also improved further, amounting to 15.2%, compared with 12.3% the previous year.

Key Figures of the Merck Group

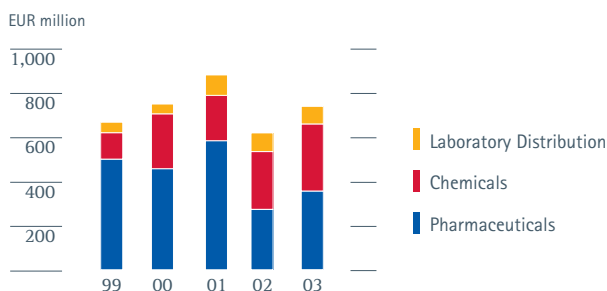
	Operating result EUR million	Exceptional items EUR million	EBIT EUR million	EBITDA EUR million	ROS %	ROCE %
Pharmaceuticals	354.2	-197.5	156.7	415.5	10.7	12.4
Chemicals	302.2	-	302.2	450.9	17.8	15.2
Laboratory Distribution	79.1	-	79.1	142.1	3.3	6.4
Merck Group	735.5	-197.5	538.0	1,008.5	10.2	12.1

EBIT = Earnings before Interest and Tax
ROS = Return on Sales

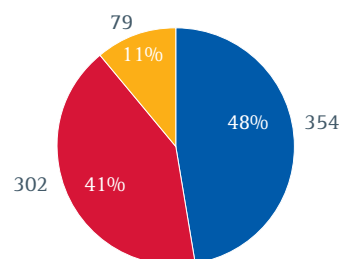
EBITDA = EBIT before Depreciation and Amortization
ROCE = Return on Capital Employed

* Due to the reclassification of Generics sales, sales of Pharmaceuticals in 2002 decreased (see page 28).

Operating Result by Business Sector



2003



The operating result of our **Laboratory Distribution** business sector dropped 6.1% year-on-year to EUR 79 million. The sector's development in Europe was very encouraging, with organic growth of 24%; in North America, however, currency effects led to a decline. There was a slight improvement in the two key figures return on sales and return on capital employed, which amounted to 3.3% and 6.4%, respectively.

Increased Expenses from Exceptional Items

Expenditure on exceptional items amounted to EUR 198 million in 2003. These items included provisions and special write-downs for the planned restructuring of production and research facilities in France (EUR 71 million), a special goodwill write-down of Théramex (EUR 50 million), compensation payments and losses from the disposal of assets due to the termination of a contract manufacturing agreement with GlaxoSmithKline (EUR 51 million), as well as settlement payments and legal costs of the proceedings at Dey Inc. (EUR 26 million).

Unchanged Free Cash Flow and Lower Total Assets

At EUR 442 million, free cash flow remained at the previous year's level. Whereas the result in 2002 was primarily due to proceeds from the disposal of equity interests, cash flow from operating activities was particularly high in the year under review. Lower investments in property, plant and equipment, and a favorable development of working capital (inventories and trade accounts receivable less non-interest-bearing trade accounts payable) were the main reasons for this development. Total assets were down EUR 529 million on the previous year, amounting to EUR 6,982 million. With 24%, liabilities in particular showed a substantial decrease, which was attributable to both the favorable development of cash flow and the capital increase. This improved the equity ratio significantly from 27.3% to 33.8%. The gearing ratio of net equity to net financial obligations (financial obligations less cash and cash equivalents) amounted to 1 : 0.62 and was thus substantially better than in 2002, when it was 1 : 0.97.

Improved Financial Result

The financial result (net expenditure) improved again. At EUR -115 million, it was down 22% year-on-year. This was attributable to the lower interest rate, the decrease in financial obligations due to the high free cash flow and the capital increase, as well as positive currency effects.

Stable Tax Rate

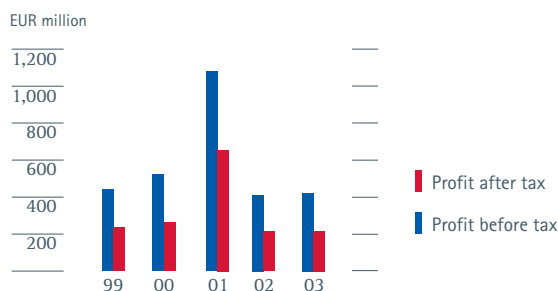
Profit before tax amounted to EUR 423 million and profit after tax to EUR 218 million. The tax rate was thus 48.5%; adjusted for exceptional items, it was 39.9%.

Dividend Proposal

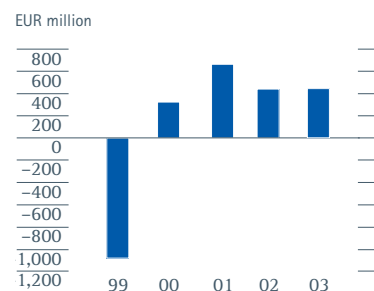
The Executive Board shall propose to the Annual General Meeting on March 26, 2004, the payment of a dividend of EUR 0.80 per share from the earnings of the year under review. Although this would be 20% less than the dividend paid for 2002, the distribution ratio would still be very high.

Further details on the financial position and the balance sheet are contained in the consolidated financial statements and the related explanatory notes starting on page 55.

Profit before and after Tax



Free Cash Flow



Risk Report of the Merck Group

Risk Management System

Risk management at Merck is a basic component of decision-making and business processes. All departments and companies of Merck are connected to an online risk management system that is upgraded on an ongoing basis. Ad hoc risk reports are provided regularly.

The many risks to which Merck is constantly exposed as a global company are thus identified in good time. They are categorized according to their risk type, level of damage and probability of occurrence. The implementation of countermeasures is monitored.

Risks for the Merck Group

Business- and Product-Related Risks

As a research-based pharmaceutical company, there is the risk for Merck of expensive development projects having to be terminated before any profit is made due to unsatisfactory results of preclinical and clinical studies. This was the case for three active agents in 2003; however, we did succeed in launching our first cancer drug, Erbitux™. There is also the risk of funds not being invested in those projects that hold the greatest economic potential. These risks are countered systematically by Project Management.

Risks from General Legal Conditions

Due to the crises in the healthcare systems of many countries, Merck is also exposed to the risks that are evolving as a result of new, general legal conditions. Such risks are generally difficult to predict for the entire pharmaceutical industry in terms of their occurrence and effects.

We counter potential risks relating to tax, competition, antitrust, patent and environmental regulations by consulting both internal and external experts.

Legal Risks

Merck is engaged in legal proceedings, the outcome of which cannot be predicted. Please refer to page 74 of the explanatory notes to the consolidated financial statements for further information.

Secured Financial Risks

We use derivatives exclusively to hedge against interest rate and currency risks. These instruments are only employed after a detailed risk assessment and in accordance with relevant guidelines.

Liability and Damage Risks

Insofar as possible, liability and damage risks are covered by insurance policies, the type and scope of which we continually adapt to current requirements.

Overall Risk Assessment

The currently identifiable risks do not threaten the existence of the Merck Group.

Outlook 2004

Progress through Focus on Core Businesses

Forecasters are predicting further recovery in the global economy in 2004. These expectations, in turn, should improve the economic climate and boost the financial markets. Leading economic research institutes anticipate growth rates of around 3.0%. As in 2003, growth will be greatest in the United States at over 4%. Growth of 1.7% is forecast for the eurozone, while Germany is only expected to grow by 1.4%. Although all indicators point to economic recovery, the risks of global economic imbalances are high: The budget deficit in the United States could continue to put pressure on the dollar.

We will continue to focus on our core businesses within Pharmaceuticals and Chemicals in 2004. In December, we announced our plans to sell our interest in BioMer C.V. – a joint venture for the orthopedics business in Europe – to our partner Biomet Inc. for USD 300 million. We expect to conclude this transaction in the first quarter of 2004 and thus generate exceptional income of USD 70 million. We also intend to divest our wholly owned subsidiary, VWR International Corp. (USA), and are currently negotiating this sale. The aim of this divestiture is to withdraw from the laboratory distribution business and focus on our profitable core businesses in Pharmaceuticals and Chemicals.

We expect the sales of our Pharmaceuticals business sector to increase slightly over the previous year, provided that the euro does not appreciate any further. The Ethicals division will launch its new cancer drug Erbitux™ and the lipid modulator Niaspan™. Our main established products in our CardioMetabolic Care business area will continue to provide a solid sales basis. The Generics division will benefit from the expirations of patents on top-selling preparations and aims to grow into one of the world's three leading generics suppliers.

Darmstadt, Germany |

A team from Darmstadt received the Merck Group's Innovation Award for their forward-looking innovations with liquid crystals in 2003. Bernhard Scheuble congratulated Kazuaki Tarumi, Andreas Wächtler, Melanie Klasen-Memmer, Volker Reiffenrath, Hiroshi Numata and Joachim Krause.

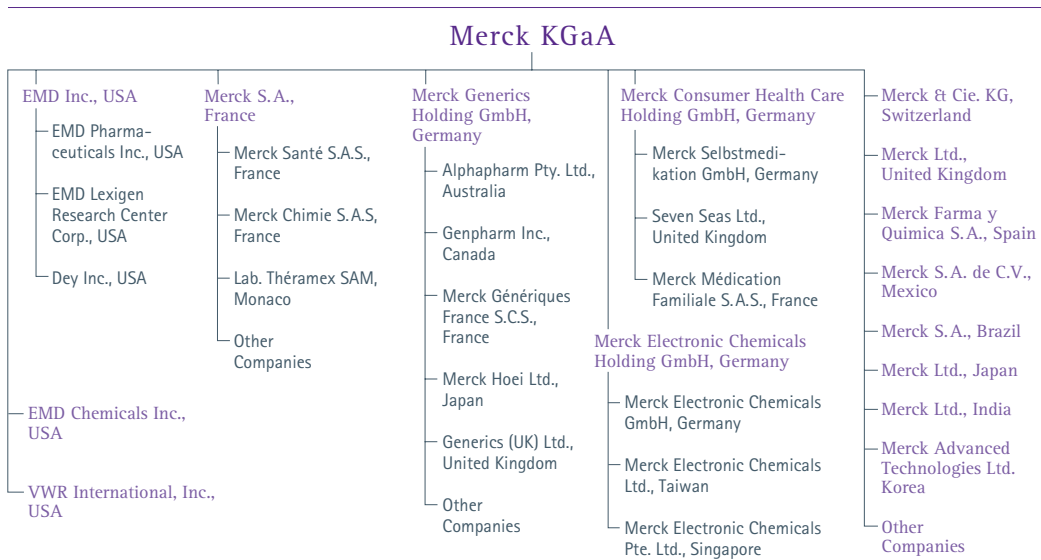


Within the Chemicals business sector, we plan to expand our market leadership in businesses with a long Merck tradition. Our successful liquid crystals business will continue to grow, thanks to the huge demand for specialized liquid crystal mixtures for PC monitors and large-format television screens, as well as the addition of color filters to the product range. Electronic Chemicals will profit from the considerable revival of the semiconductor market. We also are anticipating a positive market environment and growth for the other three divisions.

We are holding firmly to our ambitious, long-term financial targets with respect to Pharmaceuticals and Chemicals. The considerable expenditure on clinical studies for our promising new active substances and the cost of launching our new products present a major challenge to the Ethicals division; lower contributions to earnings are expected from the sales partnership for the Glucophage® product family and from license payments for the ulcer treatment omeprazole. At the same time, Chemicals will be able to increase its operating result due to the expected economic recovery. The planned divestiture of VWR would reduce sales by one third and the operating result by around 10%, and would thus increase the profit margin significantly. A declining operating result of the Merck Group and potential extra charges from pending legal proceedings will, however, be more than compensated for by the two transactions mentioned above and will facilitate an increase in profit after tax.

The cash infusion from both these transactions would increase our strategic flexibility significantly. Excluding provisions for pensions, the direct result would be a balance sheet with almost no financial obligations. In the medium term, we will expand our core businesses further and continue our 336-year company history in Pharmaceuticals and Chemicals. And we will do this with our own resources through innovations from talented, entrepreneurial employees.

Structure of the Merck Group



This simplified structure shows only the major companies of the Merck Group. 197 companies in 53 countries are fully consolidated in the financial statements of the Merck Group.

Corporate Governance

Joint Report of the Executive Board and the Supervisory Board according to Section 3.10 of the German Corporate Governance Code |

►
www.corporategovernance.
merck.de

The German Corporate Governance Code, which is also applicable to Merck as a “Kommanditgesellschaft auf Aktien” (partnership limited by shares), entered into effect in 2002. Since this Code is geared exclusively towards the conditions at an Aktiengesellschaft (German Stock Corporation), Merck KGaA had to independently examine and decide how it can be applied logically to serve the interests of the shareholders.

The Executive Board and Supervisory Board of Merck KGaA and the general partner E. Merck OHG have discussed the Code in detail and are striving to implement the Code’s recommendations at Merck KGaA as fully as possible.

In order to enable the shareholders to compare the situation at other companies more easily, we have decided to base corporate governance on the conduct recommendations made by the Code Commission relating to management and supervision (governance) and to forego having our own code, which is also permissible. On this basis, we ascertain that the recommendations of the Code are observed and indicate the remaining exceptions. The Foreword to the German Corporate Governance Code states: “The Code clarifies the rights of shareholders, who provide the company with the required equity capital and who carry the entrepreneurial risk.” The following gives a general explanation - in accordance with this Foreword - of the KGaA company form followed by the specific situation at Merck.

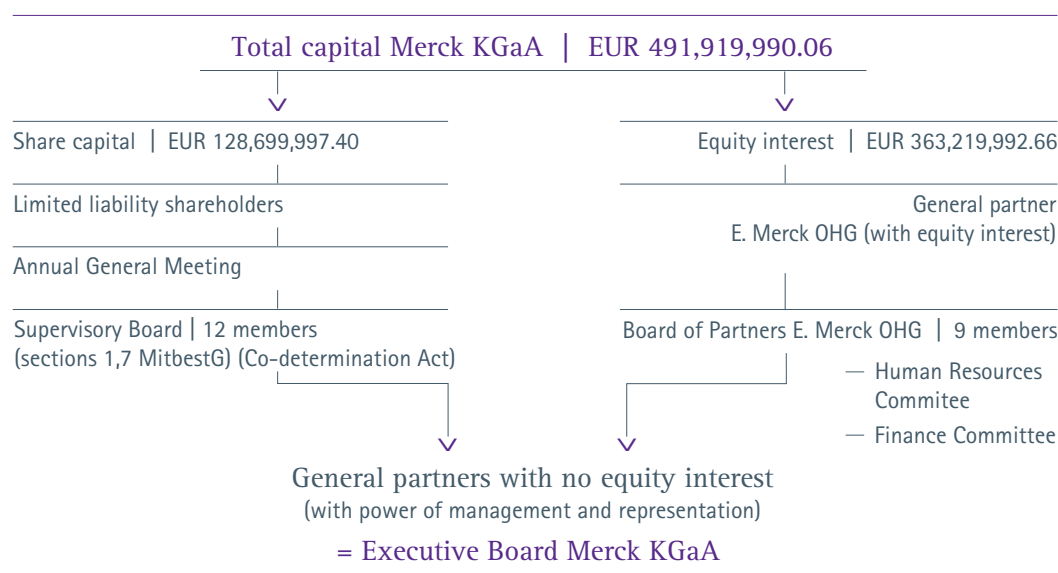
Kommanditgesellschaft auf Aktien

“The Kommanditgesellschaft auf Aktien (KGaA – partnership limited by shares) is a company with its own legal personality, at which at least one partner has unlimited liability for the company’s creditors (general partner) and the others hold an interest in the share capital without any personal liability for the company’s debts (limited liability shareholders)” (section 278 (1) AktG). It is therefore a hybrid of an Aktiengesellschaft (German Stock Corporation) and a Kommanditgesellschaft with a focus on stock corporation law. Striking differences to the Aktiengesellschaft include the presence of general partners, who essentially also manage the company’s business activities, the lack of a board of directors and the restriction of rights and obligations of the supervisory board. In particular, the supervisory board is not responsible for appointing general partners or for regulating the terms and conditions of contracts, while at the Aktiengesellschaft it appoints the board; it also does not have the authority to issue rules of procedure for the general partners or a catalog of business transactions requiring approval. The KGaA also has some peculiarities with regard to the Annual General Meeting; for example, many of the resolutions made require the approval of the general partners (section 285 (2) AktG), including the adoption of the annual financial statements (section 286 (1) AktG).

Merck KGaA

The general partner E. Merck OHG holds 73.8% of the total capital of Merck KGaA (equity interest), the limited liability shareholders hold the remainder, which is divided into shares (share capital). Both groups together thus provide – in accordance with the Foreword to the Code – “the company with the required equity capital and carry the entrepreneurial risk”. E. Merck OHG is excluded from the management of business activities. The general partners with no equity interest (Executive Board), on the other hand, manage business activities. Due to its substantial capital investment and unlimited personal liability, E. Merck OHG is an influential authority with a strong interest in compliance with procedures and efficiency of business operations at Merck KGaA. Merck KGaA’s participation in the profits of E. Merck OHG in accordance with sections 26 ff. of the Articles of Incorporation provides for further harmonization of the interests of the limited liability shareholders and E. Merck OHG. E. Merck OHG appoints and dismisses the Executive Board. E. Merck OHG created the necessary tools – in addition to the expertise and activities of the Supervisory Board – to ensure that the Executive Board is monitored and advised. This applies primarily to the Board of Partners of E. Merck OHG. Based on the provisions of the German Stock Corporation Act, the Articles of Incorporation of Merck KGaA and the rules of procedure of the various committees, Merck KGaA has a set of regulations for the Executive Board and its supervision that meet the requirements of the Code. The investors, who carry the entrepreneurial risk, are protected as foreseen by the Code.

This is clarified by the following chart.



A large number of the conduct recommendations contained in the Code, which is geared towards Aktiengesellschaften, can therefore only be applied to the KGaA as appropriate.

Deviations from the Corporate Governance Code:

1. Contrary to section 3.8 (2), the D & O insurance policy, which Merck KGaA maintains for its committee members, does not include a self-insured retention.
2. Contrary to section 4.2.4, the remuneration paid to the general partners, i.e., the members of the Executive Board, is not stated on an individualized basis.
3. Contrary to section 5.4.5 (1), committee members are not remunerated separately.
4. Contrary to section 5.4.5 (3), the remuneration paid to the members of the Supervisory Board is not stated on an individualized basis.

Main Features of the Executive Board Remuneration System and Structure of the Stock Option Program

The remuneration of the general partners, namely the Executive Board of Merck KGaA, is composed of salary payments (fixed portion), profit participation and additions to pension provisions. Profit participation is based on the rolling three-year average of profit after tax. Payments in fiscal year 2003 were as follows: Salaries EUR 2.5 million, profit participation (based on profit after tax for fiscal years 2003, 2002 and 2001) EUR 5.7 million, provisions for pensions EUR 1.3 million. This remuneration is paid by the general partner E. Merck OHG.

Merck KGaA's Annual General Meeting in 2000 resolved a stock option program for senior executives, in which members of the Executive Board also participate. From the maximum of 2,200,000 stock options, 2,153,500 were issued in two separate tranches. The program is thus fully utilized. The members of the Executive Board hold 198,000 stock options from the first tranche and 209,750 from the second tranche; 32,250 stock options have expired (as of December 31, 2003).

The term of the program ends after six years - in 2006 for the first tranche, and 2008 for the second tranche. Both tranches have a minimum vesting period of 25 months. Stock rights may only be exercised after the minimum vesting has expired if the closing price as of the balance sheet date is at least 30% higher than the exercise price. The exercise price is the mean value of the Merck share during the 30 trading days prior to the date of issue of the stock rights. In addition, the stock rights are subject to a lockup during the two calendar weeks prior to publication of the first- and third-quarterly reports, and during the eight calendar weeks prior to publication of the half-yearly or annual reports. The exercise provisions may only be amended for the purpose of antidilution protection within capital measures. Since October 2002, the options in the first tranche may be exercised at an exercise price of EUR 37.41, provided that the Merck share is listed at a price of at least EUR 48.63. The stock options in the second tranche may be exercised from May 2004 at an exercise price of EUR 34.35, provided that the Merck share has reached a price of at least EUR 44.66. It has not been possible to exercise any options to date due to non-fulfillment of the specified exercise provisions. The stock options thus have no realizable value at the present time.

Report of the Supervisory Board

During fiscal year 2003, the Executive Board provided the Supervisory Board with regular written and verbal reports on the business development of Merck KGaA and the Merck Group. In particular, the Supervisory Board was informed about the market and sales situation of the company against the background of the macroeconomic environment, the financial position of the company and its subsidiaries, as well as their earnings development and corporate planning. Important business policy matters were discussed in four joint meetings with the Executive Board. At its meeting on April 28, 2003, the Supervisory Board carried out an extensive examination of the efficiency of its activities: the results were positive. No Supervisory Board committees were set up.

The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, and the management reports for Merck KGaA and the Merck Group, including the accounting, were audited by KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft. The auditors issued an unqualified audit certificate on the annual financial statements and management report for Merck KGaA in accordance with German Auditing Standards. The auditors issued the auditor's certificate – reproduced in the Annual Report of the Merck Group – in accordance with International Financial Reporting Standards and German Auditing Standards for the consolidated financial statements prepared in accordance with International Accounting Standards. In addition, the auditors audited the calculation of Merck KGaA's participation in the profits of E. Merck OHG in accordance with Art. 27 (3) of the Articles of Incorporation. The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, the management reports for Merck KGaA and the Merck Group, and the proposal by the Executive Board for the appropriation of net retained profits were presented and distributed to the Supervisory Board, together with the auditor's reports.

In accordance with Art. 14 (2) of the Articles of Incorporation, the Supervisory Board also examined the annual financial statements of Merck KGaA, the management report for Merck KGaA, the proposal for the appropriation of net retained profits, and the auditor's report presented in accordance with Art. 27 (3) of the Articles of Incorporation. It also examined the consolidated financial statements of the Merck Group, the management report for the Merck Group, and took note of the auditor's report of KPMG Deutsche Treuhand-Gesellschaft Aktiengesellschaft Wirtschaftsprüfungsgesellschaft.

The discussion of the relevant agenda item at the Supervisory Board's meeting on February 13, 2004, to approve the financial statements was also attended by the auditors signing the audit opinion on the annual financial statements of Merck KGaA and the consolidated financial statements of the Merck Group, who reported on their audit. The Supervisory Board took note of and approved the results of the audit. On completion of its examination, the Supervisory Board found no objections and thus approves the annual financial statements and management report for Merck KGaA, the consolidated financial statements of the Merck Group, and the management report of the Merck Group prepared by the Executive Board, as well as the report presented by the auditors in accordance with Art. 27 (3) of the Articles of Incorporation. The Supervisory Board gives its consent to the proposal for the appropriation of net retained profits.

Osman Ulusoy has been an employee representative on Merck KGaA's Supervisory Board since April 2, 2003. He succeeds Hans Schönhals, who left the Supervisory Board after his retirement from the company. The Supervisory Board thanked Mr. Schönhals, who was a member of this executive body since 1995, for his both critical and constructive work.

Dr. Heinrich Hornef, who was Chairman of Merck KGaA's Supervisory Board since it was set up in 1995, effectively resigned from this position on December 31, 2003. At the Supervisory Board meeting on October 27, 2003, Merck KGaA's general partner, E. Merck OHG, the Supervisory Board and the Executive Board acknowledged Dr. Hornef's outstanding contribution to turning the company from a family-run general partnership into a listed Kommanditgesellschaft auf Aktien (partnership limited by shares), and also thanked him for his firm commitment to corporate governance. At the same meeting, Peter Zühlsdorff, who has also been a member of the Supervisory Board since 1995, was elected Chairman, effective as of January 1, 2004.

With effect from March 26, 2004, Dr. Hornef and Dr. Reinhart Freudenberg will leave their offices as members of the Supervisory Board. E. Merck OHG, the Supervisory Board and the Executive Board thanked both men at the meeting on February 13, 2004, for their productive teamwork for the good of the company, and, in addition to Dr. Hornef's achievements, highlighted the critical, business expertise that Dr. Freudenberg contributed to discussions.

Darmstadt, February 13, 2004

The Supervisory Board of Merck KGaA

A handwritten signature in black ink, appearing to read 'P. Zühlsdorff', written in a cursive style.

Peter Zühlsdorff
Chairman

Merck Group

Consolidated Financial Statements

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Balance Sheet

Assets

EUR million	Note	Dec. 31, 2003	Dec. 31, 2002
Noncurrent assets			
Intangible assets	▶ [1]	1,641.1	1,839.0
Property, plant, and equipment	▶ [2]	2,020.4	2,133.7
Long-term investments	▶ [3]	204.3	196.7
		3,865.8	4,169.4
Current assets			
Inventories	▶ [4]	1,166.7	1,194.1
Trade accounts receivable	▶ [5]	1,133.6	1,193.5
Other receivables and other assets	▶ [6]	339.0	421.3
Cash and cash equivalents	▶ [7]	297.8	339.4
		2,937.1	3,148.3
Deferred tax assets	▶ [8]	179.2	193.2
		6,982.1	7,510.9

Equity and liabilities

EUR million	Note	Dec. 31, 2003	Dec. 31, 2002
Net equity			
Equity capital	▶ [9]	491.9	447.2
Reserves		1,841.7	1,566.0
Minority interest		29.2	40.4
		2,362.8	2,053.6
Provisions			
Provisions for pensions and other post-employment benefits	▶ [10]	931.3	963.8
Other provisions	▶ [11]	784.1	659.7
		1,715.4	1,623.5
Liabilities			
Financial obligations	▶ [12]	1,764.2	2,336.9
Trade accounts payable	▶ [13]	468.3	504.8
Other liabilities	▶ [14]	572.7	866.6
		2,805.2	3,708.3
Deferred tax liabilities	▶ [15]	98.7	125.5
		6,982.1	7,510.9

Income Statement

EUR million	Note	Dec. 31, 2003	Dec. 31, 2002*)
Sales	▶ [17]	7,202.1	7,399.6
Cost of sales	▶ [18]	-3,571.9	-3,794.6
Gross margin		3,630.2	3,605.0
Marketing and selling expenses	▶ [19]	-1,722.3	-1,770.1
Administration expenses	▶ [20]	-412.4	-468.0
Other operating income and expenses	▶ [21]	-200.0	-143.3
Research and development	▶ [22]	-604.6	-608.2
Patent and license revenues	▶ [23]	140.6	97.7
Investment result	▶ [24]	15.6	23.5
Amortization of goodwill	▶ [25]	-111.6	-120.6
Operating result		735.5	616.0
Exceptional items	▶ [26]	-197.5	-56.7
Earnings before interest and tax (EBIT)		538.0	559.3
Financial result	▶ [27]	-115.4	-147.7
Profit before tax		422.6	411.6
Income tax	▶ [28]	-204.9	-196.4
Profit after tax		217.7	215.2
Minority interest	▶ [29]	-9.4	-12.2
Net profit after minority interest		208.3	203.0
Earnings per share (in EUR)	▶ [30]	1.15	1.18

▶ *) Prior-year amounts for sales, marketing and selling expenses adjusted (see page 77).

Segment Reporting

EUR million	Pharmaceuticals			Chemicals			Laboratory Distribution		
	2003	2002	Change in %	2003	2002	Change in %	2003	2002	Change in %
External sales	3,303.0	3,152.5 ^{*)}	4.8	1,700.0	1,782.5	-4.6	2,427.3	2,710.8	-10.5
Operating result	354.2	272.1	30.1	302.2	259.6	16.4	79.1	84.3	-6.1
Exceptional items	-197.5	0.2	-	-	-51.5	-	-	-5.4	-
Earnings before interest and tax (EBIT)	156.7	272.3	-42.5	302.1	208.1	45.2	79.1	78.9	0.3
Operating assets	2,807.9	2,911.9	-3.6	1,945.6	2,033.6	-4.3	1,120.6	1,345.0	-16.7
Trade accounts payable	245.0	272.5	-10.1	77.2	69.7	10.8	146.1	162.6	-10.1
Investments in property, plant, and equipment	125.3	158.0	-20.7	141.7	178.9	-20.8	13.8	40.1	-65.6
Free cash flow	86.0	254.8	-66.2	230.0	105.5	118.0	126.0	81.2	55.2
Research and development	505.8	498.7	1.4	98.8	109.5	-9.8	-	-	-

EUR million	Germany			France			Rest of Europe			North America		
	2003	2002	Change in %	2003	2002	Change in %	2003	2002	Change in %	2003	2002	Change in %
External sales by customer location ^{*)}	697.5	681.0	2.4	818.2	775.1	5.6	1,501.5	1,502.7	-0.1	2,358.4	2,647.8	-10.9
External sales by company location ^{*)}	863.9	868.1	-0.5	1,036.8	993.7	4.3	1,384.4	1,373.6	0.8	2,235.7	2,532.2	-11.7
Intragroup sales with other regions	800.8	756.0	5.9	98.4	86.1	14.3	144.8	114.1	26.9	44.2	47.2	-6.4
Operating result	-14.4	0.3	-	222.2	160.5	38.4	163.2	152.3	7.2	157.5	114.1	38.0
Exceptional items	-23.7	-40.8	-41.9	-121.3	-	-	-	-0.6	-	-52.5	-4.1	-
Earnings before interest and tax (EBIT)	-38.1	-40.5	-5.9	100.9	160.5	-37.1	163.2	151.7	7.6	105.0	110.0	-4.5
Operating assets	1,975.2	1,974.8	-	682.1	758.4	-10.1	992.5	1,053.2	-5.8	1,355.2	1,591.9	-14.9
Investments in property, plant, and equipment	157.3	177.4	-11.3	12.5	31.5	-60.3	26.1	42.6	-38.7	47.9	77.8	-38.4
Research and development	326.1	311.0	4.9	115.6	137.6	-16.0	47.3	45.1	4.9	90.5	86.3	4.9
Number of employees	9,600	9,644	-0.5	3,739	3,817	-2.0	5,432	5,434	-	5,998	6,003	-0.1

^{*)} Prior-year amounts for sales, marketing and selling expenses adjusted (see page 77).

Intragroup sales			Group		
2003	2002	Change in %	2003	2002	Change in %
-228.2	-246.2	-7.3	7,202.1	7,399.6 ¹⁾	-2.7
			735.5	616.0	19.4
			-197.5	-56.7	-
			538.0	559.3	-3.8
			5,874.1	6,290.5	-6.6
			468.3	504.8	-7.2
			280.8	377.0	-25.5
			442.0	441.5	0.1
			604.6	608.2	-0.6

Latin America			Asia			Rest of World			Group		
2003	2002	Change in %	2003	2002	Change in %	2003	2002	Change in %	2003	2002	Change in %
364.7	398.3	-8.4	1,061.2	1,037.2	2.3	400.6	357.5	12.1	7,202.1	7,399.6	-2.7
343.8	374.8	-8.3	965.5	923.1	4.6	372.0	334.1	11.3	7,202.1	7,399.6	-2.7
5.7	5.9	-3.4	23.8	20.4	16.7	36.4	19.8	83.8	1,154.1	1,049.5	10.0
48.7	42.4	14.9	119.7	106.8	12.1	38.6	39.6	-2.5	735.5	616.0	19.4
-	-	-	-	-11.2	-	-	-	-	-197.5	-56.7	-
48.7	42.4	14.9	119.7	95.6	25.2	38.6	39.6	-2.5	538.0	559.3	-3.8
195.0	216.3	-9.8	531.4	573.2	-7.3	142.7	122.7	16.3	5,874.1	6,290.5	-6.6
7.5	7.6	-1.3	20.1	33.0	-39.1	9.4	7.1	32.4	280.8	377.0	-25.5
2.0	2.5	-20.0	17.6	20.5	-14.1	5.5	5.2	5.8	604.6	608.2	-0.6
3,264	3,253	0.3	4,921	5,148	-4.4	1,252	1,205	3.9	34,206	34,504	-0.9

Cash Flow Statement

EUR million	Note	2003	2002
Profit after tax		217.7	215.2
Depreciation and amortization (noncurrent assets)		470.5	425.2
Changes in inventories		-47.1	-41.2
Changes in trade receivables		-24.5	-135.5
Changes in trade payables		-11.4	10.8
Changes in provisions		128.9	70.0
Changes in other receivables and payables from operating activities		27.0	-89.4
Gains/Losses on disposal of assets		2.3	-9.5
Other non-cash income and expenses		-11.0	-23.9
Net cash flows from operating activities	▶ [31]	752.4	421.7
Purchase of intangible assets		-25.6	-34.8
Purchase of property, plant, and equipment		-280.8	-377.0
Purchase of long-term investments/Changes in companies consolidated		-45.2	-29.9
Disposal of assets		41.2	461.5
Net cash flows from investing activities	▶ [32]	-310.4	19.8
Free cash flow		442.0	441.5
Dividend payments		-53.9	-49.5
Profit transferred to E. Merck OHG		-125.8	-188.9
Capital increase		404.2	-
Changes in liabilities to E. Merck OHG		-222.3	0.2
Changes in financial obligations		-469.7	-286.3
Other changes from financing activities		6.9	7.4
Net cash flows from financing activities	▶ [33]	-460.6	-517.1
Changes in cash and cash equivalents		-18.6	-75.6
Changes in cash and cash equivalents due to currency translation		-23.1	-49.5
Changes in cash and cash equivalents due to changes in companies consolidated		0.1	0.3
Cash and cash equivalents as of January 1		339.4	464.2
Cash and cash equivalents as of December 31	▶ [34]	297.8	339.4

Statement of Changes in Noncurrent Assets

EUR million	Intangible assets	Property, plant, and equipment	Long-term investments	Total
Accumulated acquisition cost as of Jan. 1, 2003	2,575.3	4,190.0	228.6	6,993.9
Currency translation	-85.5	-166.7	-16.5	-268.7
Changes in companies consolidated	13.5	-1.1	-19.3	-6.9
Additions	25.6	280.8	61.2	367.6
Disposals	-19.2	-111.6	-19.8	-150.6
Transfers	16.2	-6.8	-9.4	-
Accumulated acquisition cost as of Dec. 31, 2003	2,525.9	4,184.6	224.8	6,935.3
Accumulated depreciation, amortization, write-downs and fair value adjustments as of Jan. 1, 2003	-736.3	-2,056.3	-31.9	-2,824.5
Currency translation	25.5	75.9	-	101.4
Changes in companies consolidated	0.3	3.2	-	3.5
Depreciation, amortization and write-downs	-198.2	-269.9	-2.4	-470.5
Disposals	24.5	81.7	0.9	107.1
Transfers	-1.1	1.1	-	-
Write-ups	0.5	0.1	0.3	0.9
Fair value adjustments of financial instruments taken directly to equity	-	-	12.6	12.6
Accumulated depreciation, amortization, write-downs and fair value adjustments as of Dec. 31, 2003	-884.8	-2,164.2	-20.5	-3,069.5
Net carrying amount as of Dec. 31, 2003	1,641.1	2,020.4	204.3	3,865.8

Statement of Changes in Net Equity

Including Minority Interest

EUR million	Equity capital		Reserves			Minority interest	Total
	General partner's equity Merck KGaA	Subscribed capital Merck KGaA	Capital reserves (share premium) Merck KGaA	Retained earnings/Net retained profits/Consolidated items	Recognition of financial instruments at fair value		
Balance as of Jan. 1, 2002	330.2	117.0	1,407.0	416.4	25.1	40.8	2,336.5
Profit after tax	-	-	-	203.0	-	12.2	215.2
Dividend payments to shareholders of Merck KGaA	-	-	-	-42.8	-	-	-42.8
Dividend payments to other minority shareholders in the Merck Group	-	-	-	-	-	-6.8	-6.8
Profits transferred by Merck & Cie to E. Merck OHG	-	-	-	-64.5	-	-	-64.5
Profits transferred by E. Merck OHG to Merck KGaA	-	-	-	11.6	-	-	11.6
Profits transferred by Merck KGaA to E. Merck OHG	-	-	-	-149.3	-	-	-149.3
Appropriation to retained earnings/profit brought forward by E. Merck OHG	-	-	-	13.4	-	-	13.4
Currency translation difference	-	-	-	-260.7	-0.7	-	-261.4
Adjustment from the fair market valuation of financial instruments taken directly to equity	-	-	-	-	-15.7	-	-15.7
Changes in companies consolidated/Other	-	-	-	23.2	-	-5.8	17.4
Balance as of Dec. 31, 2002	330.2	117.0	1,407.0	150.3	8.7	40.4	2,053.6
Balance as of Jan. 1, 2003	330.2	117.0	1,407.0	150.3	8.7	40.4	2,053.6
Profit after tax	-	-	-	208.3	-	9.4	217.7
Dividend payments to shareholders of Merck KGaA	-	-	-	-45.0	-	-	-45.0
Dividend payments to other minority shareholders in the Merck Group	-	-	-	-	-	-8.9	-8.9
Profits transferred by Merck & Cie to E. Merck OHG	-	-	-	-53.7	-	-	-53.7
Profits transferred by E. Merck OHG to Merck KGaA	-	-	-	10.6	-	-	10.6
Profits transferred by Merck KGaA to E. Merck OHG	-	-	-	-97.3	-	-	-97.3
Capital increase	33.0	11.7	359.5	-	-	-	404.2
Appropriation to retained earnings/profit brought forward by E. Merck OHG	-	-	-	14.6	-	-	14.6
Currency translation difference	-	-	-	-132.7	-0.1	-	-132.8
Adjustment from the fair market valuation of financial instruments taken directly to equity	-	-	-	-	10.0	-	10.0
Changes in companies consolidated/Other	-	-	-	1.5	-	-11.7	-10.2
Balance as of Dec. 31, 2003	363.2	128.7	1,766.5	56.6	18.6	29.2	2,362.8

Notes

Preliminary remarks The accompanying consolidated financial statements have been prepared with Merck KGaA – which manages the operations of the Merck Group – as parent company. In addition, in accordance with the provisions of the Publizitätsgesetz (German Disclosure Act), consolidated financial statements have also been prepared for E. Merck OHG – the general partner in Merck KGaA with a 73.8% share in equity - including Merck KGaA and its subsidiaries, and published in the Bundesanzeiger (Federal Gazette) and filed with the commercial register under the number HR A 3614.

Application of International Financial Reporting Standards (IFRS) The consolidated financial statements of the Merck Group for 2003 – with Merck KGaA as parent company – have been prepared in accordance with consistent accounting policies using the International Accounting Standards published by the International Accounting Standards Board (IASB) applicable as of the balance sheet date.

The following differences as against the accounting and valuation policies of the Handelsgesetzbuch (“HGB” – German Commercial Code) apply to the Merck Group’s consolidated financial statements:

- Monetary items in foreign currencies which are carried in the single-entity financial statements of the companies consolidated are valued at closing rates in accordance with IAS 21; the HGB requires application of the imparity principle for long-term receivables and liabilities.
- The concept of temporary differences for which deferred taxes must be recognized is interpreted more broadly under IFRS than the HGB. In addition, IFRS requires the recognition of deferred tax assets arising from tax loss carryforwards, in contrast to the HGB.
- Under IAS 39 (rev. 2000), financial instruments originated by the company and classified as available for sale must be carried at their fair value, whereas the HGB requires these to be carried at acquisition cost. IAS 39 (rev. 2000) also states that derivative financial instruments must be carried as an asset or a liability at their fair value. The HGB does not permit the recognition of the fair values of derivatives.

Companies consolidated Including the parent company, Merck KGaA, Darmstadt, 197 companies are fully consolidated in the financial statements of the Merck Group. A further 5 associates are included using the equity method. A total of 65 investments are not consolidated as a result of either their minor importance or a lack of financial control, and are carried under long-term investments in the consolidated financial statements. During the current fiscal year, 10 companies were included in the consolidated financial statements for the first time. In 2003, 17 companies were deconsolidated, primarily as a result of mergers and liquidations.

In August 2003, Merck acquired 100% of Peter Black Direct Marketing, the British direct marketer of vitamins, minerals and supplements for EUR 22.8 million. In the following years, up to GBP 2 million may be incurred in further acquisition costs under the related earn-out agreement. The company was renamed Lamberts Healthcare Ltd. This acquisition strengthened the Consumer Health Care division’s market share in the United Kingdom. In April 2003, Merck sold its 100% equity interest in Nutriblend Ltd., Rochester, UK, which was part of the Life Science Products division. In December 2003, Merck acquired the remaining interest in Merck Electronic Chemicals Ltd., Taiwan, (21%) for EUR 8.0 million.

Overall, the changes in the companies consolidated due to acquisitions and disposals of companies had the following effects on the consolidated balance sheet:

EUR million	Acquisitions/ First-time consolidations	Disposals/ Deconsolidations
Intangible assets	22.1	-1.0
Property, plant, and equipment	6.5	-4.8
Long-term investments	0.3	-
Current assets	6.7	-8.7
Liabilities/Provisions	6.9	-3.0

Including acquisitions that were only recorded ratably in the previous year's financial statements, as well as intraperiod disposals, sales and earnings during the fiscal year were impacted by the following effects on the consolidated financial statements caused by changes in companies consolidated:

EUR million	Acquisitions/ First-time consolidations	Disposals/ Deconsolidations
Sales	36.4	-56.2
Operating result	2.5	-10.9

Consolidation methods The consolidated financial statements are based on the single-entity financial statements of the consolidated companies as of December 31, 2003, which were prepared using consistent accounting policies in accordance with IFRS, and audited by certified auditors.

Capital consolidation used the purchase method in accordance with IAS 22 (Business Combinations). The carrying values at the time of acquisition were applied for subsidiaries consolidated for the first time in the year under review, on the basis of corresponding interim financial statements. Resulting differences are taken to assets and liabilities to the extent that their fair values differ from the values actually carried in the financial statements. Any remaining difference is taken to goodwill in the noncurrent assets and written down by regular straight-line amortization over its expected useful life in accordance with IAS 22.

Intragroup sales, expenses and income, as well as all receivables and payables between the consolidated companies, were eliminated. The carrying value of assets from intragroup deliveries carried under non-current assets and inventories was adjusted by eliminating any intragroup profits.

Currency translation The functional currency concept applies to the translation of financial statements of consolidated companies prepared in foreign currencies. As the companies of the Merck Group conduct their business operations independently, they are treated as "foreign entities" as defined by IAS 21. This standard requires that assets and liabilities are translated at the closing rate, and income and expenses at the average rate for the year. Any resulting difference is not recognized in income and is taken to equity. If Group companies are deconsolidated, existing currency differences are reversed and recognized in income.

Foreign currency monetary items (cash and cash equivalents, receivables and payables) in the single-entity financial statements of the consolidated companies prepared in the local currency are translated at the closing rates in accordance with IAS 21. Hedged items are also valued at the closing rates in accordance with IAS 21. The resulting unrealized gains or losses are eliminated against offsetting amounts from the fair value recognition of derivatives in the income statement. Non-monetary items denominated in foreign currencies are carried at their historical values. Exchange differences from the translation of monetary items are recognized in income.

The income statement contains exchange rate gains from financing activities involving foreign exchange transactions totaling EUR 2.3 million (previous year: EUR 11.8 million exchange losses). These are reported in the financial result. Exchange rate gains from operating activities amounted to EUR 5.4 million, and primarily related to the exchange rate development of the yen (previous year: EUR 10.4 million exchange rate losses). These exchange differences are included in other operating income and expenses.

Notes to the Balance Sheet

◀ [1] Intangible assets

EUR million	Acquired concessions, patents, licenses and similar rights	Goodwill	Advance payments	Total
Accumulated acquisition cost as of Jan. 1, 2003	307.7	2,259.5	8.1	2,575.3
Currency translation	-4.0	-81.5	-	-85.5
Changes in companies consolidated	-0.1	13.6	-	13.5
Additions	12.9	5.2	7.5	25.6
Disposals	-18.6	-	-0.6	-19.2
Transfers	15.7	8.6	-8.1	16.2
Accumulated acquisition cost as of Dec. 31, 2003	313.6	2,205.4	6.9	2,525.9
Accumulated depreciation, amortization and write-downs as of Jan. 1, 2003	-196.9	-539.4	-	-736.3
Currency translation	2.4	23.1	-	25.5
Changes in companies consolidated	-	0.3	-	0.3
Amortization and write-downs	-36.6	-161.6	-	-198.2
Disposals	15.4	9.1	-	24.5
Transfers	-1.1	-	-	-1.1
Write-ups	0.5	-	-	0.5
Accumulated depreciation, amortization and write-downs as of Dec. 31, 2003	-216.3	-668.5	-	-884.8
Net carrying amount as of Dec. 31, 2003	97.3	1,536.9	6.9	1,641.1

Acquired intangible assets are carried at cost less regular straight-line amortization over their useful lives. The useful lives of acquired concessions, property rights, licenses, patents and software are between 3 and 10 years. Special write-downs are charged where required, and these are subsequently reversed if the original grounds for the write-down no longer apply. As a rule, goodwill is amortized over a 20-year period in accordance with IAS 22.

The acquisition of Lamberts Healthcare Ltd. generated goodwill of EUR 22.4 million.

Due to sustained impairment, write-downs of intangible assets in the amount of EUR 55.5 million (previous year: EUR 7.9 million) were charged. The main part of this amount relates to a EUR 50 million write-down of part of the goodwill from our subsidiary, Thérámex, which is active in the women's health field. A 7.5% discount rate was applied to the value in use to calculate the write-down in accordance with IAS 36. The write-downs are recognized in the income statement under exceptional items from the Pharmaceuticals business sector. The remaining write-downs relate to distribution and other rights in the Pharmaceuticals business sector and are recognized in the income statement under other operating expenses and research and development.

◀ [2] Property, plant, and equipment

EUR million	Land, land rights, and buildings, including buildings on third-party land	Plant and machinery	Other facilities, operating and office equipment	Construction in progress and advance pay- ments to vendors and contractors	Total
Accumulated acquisition cost as of Jan. 1, 2003	1,279.4	1,986.3	683.9	240.4	4,190.0
Currency translation	-59.3	-79.1	-23.0	-5.3	-166.7
Changes in companies consolidated	-1.6	-0.8	1.3	-	-1.1
Additions	20.4	49.8	38.8	171.8	280.8
Disposals	-16.8	-41.4	-43.4	-10.0	-111.6
Transfers	40.0	74.7	19.9	-141.4	-6.8
Accumulated acquisition cost as of Dec. 31, 2003	1,262.1	1,989.5	677.5	255.5	4,184.6
Accumulated depreciation, amortization and write-downs as of Jan. 1, 2003	-445.0	-1,178.9	-421.4	-11.0	-2,056.3
Currency translation	14.7	47.6	13.4	0.2	75.9
Changes in companies consolidated	1.6	2.5	-0.9	-	3.2
Depreciation and write-downs	-57.6	-146.3	-65.1	-0.9	-269.9
Disposals	9.6	33.8	38.0	0.3	81.7
Transfers	-3.2	7.0	-2.7	-	1.1
Write-ups	-	-	0.1	-	0.1
Accumulated depreciation, amortization and write-downs as of Dec. 31, 2003	-479.9	-1,234.3	-438.6	-11.4	-2,164.2
Net carrying amount as of Dec. 31, 2003	782.2	755.2	238.9	244.1	2,020.4

Property, plant, and equipment is carried at acquisition or manufacturing cost, less depreciation and write-downs. Subsequent acquisition costs are capitalized. The manufacturing cost of self-constructed property, plant, and equipment is calculated on the basis of the directly attributable unit costs as well as an appropriate share of overheads, including depreciation and write-downs. Financing costs are not capitalized. In the case of acquisitions denominated in foreign currencies, subsequent exchange rate movements do not affect recognition of the asset at the original acquisition or manufacturing cost.

In accordance with IAS 20, acquisition or manufacturing costs are reduced by the amount of government grants or subsidies in those cases where such grants or subsidies have been paid for the acquisition or manufacture of assets (investment grants). Grants related to income that will no longer be offset by future expenses are taken to income. Total government grants and subsidies during the fiscal year amounted to EUR 3.8 million (previous year: EUR 3.8 million).

Property, plant, and equipment is written down by straight-line depreciation over the useful life of the asset concerned. The useful life applied to production buildings is a maximum of 33 years. Administration buildings are depreciated over a maximum of 40 years. For technical equipment the depreciation period is between 8 and 20 years, and 4 to 10 years for other facilities, operating and office equipment. Special write-downs are charged where required in accordance with IAS 36, and these are subsequently reversed if the original grounds for the write-down no longer apply. In the year under review, special write-downs in the amount of EUR 38.1 million (previous year: EUR 16.7 million) were charged on property, plant, and equipment. This includes the write off in full of EUR 18.1 million relating to buildings and technical equipment in connection with planned restructuring programs in France (Pharmaceuticals business sector). These are part of the total expenses for restructuring costs in France that are shown under exceptional items. The remaining impairment losses mainly relate to production facilities in the Chemicals business sector. These are reported in the income statement under other operating expenses.

Where assets are rented or leased and economic ownership lies with the respective Group company (finance leases), they are recognized as assets at the present value of the lease payments or at a lower fair value in accordance with IAS 17 (revised 1997) and written down over the useful life of the asset. The corresponding payment obligations from future lease payments are recorded as liabilities. The total value of capitalized leased assets amounts to EUR 20.0 million and the corresponding obligations amount to EUR 9.9 million (please refer to the explanatory notes, section (13) 'Financial obligations').

The capitalized leased assets are as follows:

EUR million	Dec. 31, 2003	Dec. 31, 2002
Capitalized leased land	2.1	2.1
Capitalized leased buildings	16.5	17.1
Capitalized leased facilities	0.8	3.0
Capitalized leased vehicles	0.6	1.4
	20.0	23.6

◀ [3] Long-term investments

EUR million	Investments in:			Other securities		Loans to:			Total
	associates	companies classified as "available-for-sale"	other affiliates	classified as "available-for-sale"	classified as "held-to-maturity"	associates	other affiliates	other companies	
Accumulated acquisition cost as of Jan. 1, 2003	167.4	35.5	7.5	6.2	1.0	-	0.1	10.9	228.6
Currency translation	-16.3	-0.1	-0.1	0.1	0.2	-	-	-0.3	-16.5
Changes in companies consolidated	-	-	-19.6	0.3	-	-	-	-	-19.3
Additions	9.8	17.1	30.9	0.1	-	-	-	3.3	61.2
Disposals	-0.7	-2.7	-13.3	-0.1	-0.1	-	-	-2.9	-19.8
Reclassifications	-9.4	0.3	-	-0.3	-	-	-	-	-9.4
Accumulated acquisition cost as of Dec. 31, 2003	150.8	50.1	5.4	6.3	1.1	-	0.1	11.0	224.8
Accumulated depreciation, amortization, write-downs and fair value adjustments as of Jan. 1, 2003	-5.9	-21.1	-0.3	-4.3	-	-	-	-0.3	-31.9
Currency translation	-	0.1	-0.1	-	-	-	-	-	-
Changes in companies consolidated	-	-	-	-	-	-	-	-	-
Amortization and write-downs/discounts	-1.6	-	-0.7	-	-	-	-	-0.1	-2.4
Disposals	-	0.6	0.3	-	-	-	-	-	0.9
Write-ups	0.3	-	-	-	-	-	-	-	0.3
Fair value adjustments of long-term investments taken directly to equity	-	12.6	-	-	-	-	-	-	12.6
Accumulated depreciation, amortization, write-downs and fair value adjustments as of Dec. 31, 2003	-7.2	-7.8	-0.8	-4.3	-	-	-	-0.4	-20.5
Net carrying amount as of Dec. 31, 2003	143.6	42.3	4.6	2.0	1.1	-	0.1	10.6	204.3

Long-term investments classified as available-for-sale are usually carried at fair value. Changes in fair value are generally taken directly to equity. If there are indications of lasting impairment, an impairment test is performed and any resulting write-downs are recognized in income. If the fair value cannot be reliably estimated, investments are valued at acquisition cost less write-downs if necessary. For this reason, long-term investments were valued at cost with a carrying amount of EUR 4.5 million as of December 31, 2003. For the same reason, the interests in subsidiaries disclosed under other investments, which are not consolidated as they are of minor importance, are valued at acquisition cost. Interests in associates are adjusted at equity unless they are of minor importance. All other long-term investments are carried at (amortized) acquisition cost less write-downs if necessary.

No material items of long-term investments were reclassified between the individual categories of financial instruments during the fiscal year. The following amounts arising from long-term investments classified as available-for-sale were recognized in equity as of the balance sheet date:

EUR million	Available-for-sale investments	Available-for-sale securities	Total Dec. 31, 2003
Fair values	37.8	2.0	39.8
Amortized acquisition cost	-24.2	-2.0	-26.2
Unrealized gains/losses	13.6	-	13.6

No significant liability risks or capital commitments connected with joint ventures exist as of the balance sheet date.

A statement of Merck KGaA's equity interests is filed with the commercial register of Darmstadt Local Court under the number HR B6164. Major companies of the Merck Group as of December 31, 2003 are presented in the following table:

	Direct equity interest in %	Sales ¹⁾ EUR million	Profit after tax ¹⁾ EUR million	Net equity ¹⁾ EUR million	Employees ¹⁾
Major companies of the Merck Group:					
Germany/Europe					
Merck KGaA, Darmstadt, Germany	Parent company	1,279.5	44.8	2,775.7	8,263
VWR Companies Europe	100.00	881.4	14.7 ²⁾	176.3 ³⁾	2,763
Merck Santé S.A.S., Lyon, France	100.00	416.1	54.7	357.8	1,506
Merck Liphä Santé S.A.S., Lyon, France	100.00	254.1	27.9	67.1	470
Merck Génériques France S.C.S., Lyon, France	100.00	192.4	18.9	24.8	256
Generics (UK) Ltd., Potters Bar, United Kingdom	100.00	171.9	-6.9	21.2	406
Merck Spain Group, Mollet del Valles, Spain	100.00	140.7	13.0	65.6	757
Laboratoire Théramex S.A.M., Monaco	100.00	105.8	8.6	41.7	482
McDermott Laboratories Ltd. (Gerard), Dublin, Ireland	100.00	100.1	11.0	43.7	296
Merck Médication Familiale S.A.S., Lyon, France	100.00	87.9	3.0	25.7	188
Seven Seas Group, Hull, United Kingdom	100.00	87.6	6.1	20.7	407
Merck Chimie S.A.S., Fontenay s/Bois, France	100.00	78.1	7.3	38.4	53
Merck & Cie KG, Altdorf, Switzerland	99.84	75.6	137.9	50.9	82
Merck N.V.-S.A., Overijse, Belgium	100.00	65.6	6.6	8.1	146
Merck Austria Group, Vienna, Austria	100.00	46.9	3.9	14.3	90
Merck UK, Poole, United Kingdom	100.00	45.3	3.5	31.5	223
Merck AG, Zug, Switzerland and Darmstadt, Germany	100.00	-	73.9	377.3	5

Major companies of the Merck Group, continued:

	Direct equity interest in %	Sales ¹⁾ EUR million	Profit after tax ¹⁾ EUR million	Net equity ¹⁾ EUR million	Employees ¹⁾
North America					
VWR NA Group, West Chester, United States	100.00	1,604.0	39.9	471.3	3,061
Dey, Inc., Napa, United States	100.00	314.7	43.6	85.8	1,042
EMD Chemicals, Inc., Hawthorne, United States	100.00	193.9	8.7	532.4	666
Genpharm, Inc., Etobicoke, Canada	100.00	160.0	41.7	95.4	572
EMD Biosciences Group, San Diego, United States	100.00	66.6	5.0	30.0	360
EMD Pharmaceuticals, Inc., Durham, United States	100.00	-	-50.2	-109.7	162
Latin America					
Merck S.A. de C.V., Estado de México, Mexico	100.00	119.4	10.8	48.5	793
Merck S.A., Rio de Janeiro, Brazil	100.00	87.3	5.0	29.6	976
Merck S.A., Bogota, Colombia	100.00	30.8	2.0	16.4	373
Asia, Africa, Australasia					
Merck Ltd., Tokyo, Japan	100.00	369.7	25.5	71.8	366
Alphapharm Pty. Ltd., Sydney, Australia	100.00	323.8	18.1	86.9	689
Merck Hoei Ltd., Osaka, Japan	93.50	98.2	6.6	23.1	212
Merck Electronic Chemicals Ltd., Taoyuan, Taiwan	100.00	90.3	8.9	35.6	213
Merck Ltd., Mumbai, India	51.00	69.0	8.8	37.6	950
Pacific Pharmaceuticals Ltd., Auckland, New Zealand	100.00	35.3	4.0	16.8	184
Merck Marker (Pvt.) Ltd., Karachi, Pakistan	75.00	32.7	4.6	11.8	786
Merck Indonesia Group, Jakarta, Indonesia	73.99	30.5	5.2	15.0	529

¹⁾ Figures for the entire company unconsolidated, irrespective of the equity interest

²⁾ Consolidated figures of the individual companies

³⁾ Net equity of the European holding company

◀ [4] Inventories

EUR million	Dec. 31, 2003	Dec. 31, 2002
Raw materials and production supplies	215.7	230.0
Work in progress, finished goods and goods purchased for resale	949.1	962.4
Advance payments	1.9	1.7
	1,166.7	1,194.1

Inventories are carried at cost. In addition to directly attributable unit costs, manufacturing costs also include overheads attributable to the production process, including an appropriate share of depreciation charges on production facilities, in accordance with IAS 2. Financing costs are not recognized. The lower realizable net selling price (recoverable amount) is applied if required. Write-downs on inventories as of the balance sheet date amount to EUR 110.6 million (previous year: EUR 114.3 million); the carrying amount of inventories that have been written down amounts to EUR 279.2 million (previous year: EUR 307.4 million). As of the balance sheet date, inventories were not used to secure liabilities. There were no significant contracts to be accounted for in accordance with IAS 11 (Construction Contracts) as of the balance sheet date.

◀ [5] Trade accounts receivable

EUR million	thereof due in less than 1 year	thereof due after more than 1 year	Total Dec. 31, 2003	thereof due in less than 1 year	thereof due after more than 1 year	Total Dec. 31, 2002
from associates	1.7	-	1.7	1.0	-	1.0
from other affiliates	0.8	-	0.8	3.3	-	3.3
from other companies	1,124.8	6.3	1,131.1	1,180.6	8.6	1,189.2
	1,127.3	6.3	1,133.6	1,184.9	8.6	1,193.5

Trade accounts receivable are carried at their principal amount. Unless they are covered by insurance policies, write-downs are charged for default risks.

◀ [6] Other receivables and other assets

EUR million	thereof due in less than 1 year	thereof due after more than 1 year	Total Dec. 31, 2003	thereof due in less than 1 year	thereof due after more than 1 year	Total Dec. 31, 2002
from associates	0.1	-	0.1	0.3	-	0.3
from other affiliates	3.4	-	3.4	7.6	-	7.6
Tax receivables	143.5	0.3	143.8	158.3	1.3	159.6
Derivative financial instruments	12.5	-	12.5	13.4	-	13.4
Receivables from related parties	5.1	-	5.1	5.7	-	5.7
Other receivables from other companies	53.8	1.4	55.2	80.7	1.3	82.0
Prepaid expenses	41.8	5.6	47.4	52.9	2.9	55.8
Deferred pension payments	28.7	-	28.7	48.8	-	48.8
Other assets	38.7	4.1	42.8	15.6	32.5	48.1
	327.6	11.4	339.0	383.3	38.0	421.3

Other receivables and other assets are reported at par and carried at their principal amount, less write-downs for any default or other risks.

◀ [7] Cash and cash equivalents

EUR million	Dec. 31, 2003	Dec. 31, 2002
Cheques, cash and bank balances	253.8	280.9
Held-to-maturity securities	22.2	48.0
Available-for-sale securities	21.8	10.5
	297.8	339.4

Changes in cash and cash equivalents as defined by IAS 7 are presented in the attached cash flow statement.

Cash and bank balances are carried at their principal amount. Securities comprise marketable short-term securities. Held-to-maturity securities are valued at acquisition cost. These are short-term investments. Available-for-sale securities are carried at fair value, and changes associated with the normal volatility of fair values are recognized directly in net equity. In the fiscal year, the recognition of securities held as "available-for-sale" at fair value did not generate any changes in equity. Gains from the disposal of securities in the amount of EUR 1.8 million, previously carried straight to equity, were recognized in income.

As of the balance sheet date, the fair value of available-for-sale securities corresponded to their cost.

EUR million	Dec. 31, 2003
Fair value	21.8
Amortized acquisition cost	-21.8
Unrealized gains/losses	0.0

No reclassifications of securities were performed across the individual categories during the fiscal year.

◀ **[8] Deferred tax assets** Deferred tax assets result from differences in the carrying amounts in the financial and tax accounts of Group companies as well as from consolidation measures, in so far as these differences reverse over time. Deferred tax assets are recognized in accordance with IAS 12 (rev. 2000). In accordance with the liability method, the tax rates that are applicable or enacted as of the balance sheet date are applied. Additional explanatory notes on deferred tax assets are contained in section (28) 'Income tax'.

▶ ◀ **[9] Net equity** A separate statement of changes in net equity is attached (see page 62). The subscribed capital of Merck KGaA is composed of 49,499,999 no-par value shares. In addition to the reserves of Merck KGaA, the reserves contain the retained earnings of the consolidated subsidiaries and the effects of consolidation measures. The disclosure of minority interest is based on the stated equity of the subsidiaries concerned after any adjustment required to ensure compliance with the accounting and reporting policies of the Merck Group, as well as proportionate consolidation entries.

Merck KGaA issued 4,499,999 no-par value shares, with pre-emptive rights disappplied, at EUR 23.50 per share with a total value of EUR 105.75 million under a private placement. This was recorded in the commercial register on July 4, 2003. At the same time, the general partner, E. Merck OHG, resolved to increase its equity interest in the same proportion and under the same terms. Net equity therefore rose by EUR 404.2 million in total. Costs of EUR 3.2 million relating to the capital increase were charged directly to equity.

In addition to the dividend payments to the shareholders of Merck KGaA and to minority shareholders in subsidiary companies of the Merck Group, the appropriation of profits includes the transfer of profits from Merck & Cie KG to E. Merck in accordance with the company agreements and the reciprocal transfer of profits between E. Merck and Merck KGaA, also in accordance with the Articles of Incorporation. In accordance with capitalization, E. Merck participates in EUR -97.3 million (73.8%) of the profits of Merck KGaA, and Merck KGaA participates in EUR 10.6 million (26.2%) of the profits of E. Merck OHG. Merck KGaA's profit from ordinary activities, on which the appropriation of its profits is based, amounts to EUR 131.8 million. E. Merck OHG's result, on which the appropriation of its profits is based, amounts to EUR 40.5 million, and is composed of expenses totaling EUR 20.1 million and earnings of EUR 60.6 million (primarily investment income of Merck & Cie KG).

The following table shows the development of changes taken directly to equity as a result of recognizing financial instruments at fair value in accordance with IAS 39.

EUR million	Available-for-sale long-term investments	Available-for-sale marketable securities	Derivative financial instruments	Total
Balance as of Jan. 1, 2003	0.9	2.2	5.6	8.7
Fair value adjustments	14.0	-	7.8	21.8
Deferred taxes recognized in equity	-	-	-0.9	-0.9
Reclassification to income statement	-1.4	-1.8	-7.7	-10.9
Total subsequent measurement in fiscal year	12.6	-1.8	-0.8	10.0
Currency translation difference	0.1	-0.4	0.2	-0.1
Balance as of Dec. 31, 2003	13.6	0.0	5.0	18.6

As part of the stock option program for senior executives resolved by the Annual General Meeting 2000, the creation of EUR 5,720,000 contingent capital for issuing stock rights was approved. A maximum of 2,200,000 stock options may be issued from the approved contingent capital. To date, 2,153,500 options have been granted in two tranches. The term of the program for both tranches is six years. Both tranches have a minimum vesting period of 25 months. Stock rights may only be exercised after the minimum vesting period has expired, if the closing date price is at least 30 % higher than the exercise price. The exercise price is the mean value of Merck's stocks in the Frankfurt Xetra trading system, commencing 30 days before the date of issue of the stock rights. In addition, the rights are subject to a lockup that begins two calendar weeks before the date of publication of the Q1 and Q3 reports and eight calendar weeks before the date of publication of the H1 and Annual Reports. When granted, the first tranche included 766,500 options, of which 59,750 have expired as of the balance sheet date. As of October 2002, options from the first tranche may be exercised at the exercise price of EUR 37.41, provided that Merck's share price is not below EUR 48.63. No options had been issued as of the balance sheet date as the exercise conditions had not been met. When granted, the second tranche included 1,387,000 options, of which 126,750 have expired as of the balance sheet date. These stock options may be exercised as of May 2004, at an exercise price of EUR 34.35, provided that Merck's share price is not below EUR 44.66. The stock options have not been recognized in the income statement or the balance sheet in these financial statements.

- ◀ **[10] Provisions for pensions and other post-employment benefits** Different retirement benefit systems are provided for the employees of the Merck Group depending on the legal, economic and fiscal circumstances prevailing in each country. As a rule, these systems are based on the length of service and salary of the employees. Pension obligations in the Merck Group relate to both defined benefit and defined contribution plans, and comprise both obligations from current pensions and accrued benefits for pensions payable in the future.

Defined benefit plans in the Merck Group are both funded and unfunded. The bulk of obligations from current pensions and accrued benefits for pensions payable in the future is covered by the provisions carried in the balance sheet, while the rest is covered by funded benefit obligations. The provisions also contain other post-employment benefits, such as accrued future healthcare costs for pensioners (USA).

Average actuarial parameters:

	2003	2002
Discount rate	5.5%	6.0%
Future salary growth	3.2%	3.0%
Future pension increases	1.9%	1.8%
Fluctuation	2.8%	2.9%
Expected return on plan assets	6.9%	7.9%

The obligations of our companies under defined benefit plans are measured using the projected unit credit method in accordance with IAS 19. Under the projected unit credit method, dynamic parameters are taken into account in calculating the expected benefit payments after an insured event occurs; these payments are spread over the entire period of service of the participating employees. Actuarial reports are prepared annually for this purpose. The actuarial assumptions detailed in the table above form the basis of measurement for our companies' obligations. These are average values weighted by the present value of the respective benefit obligation, with the exception of the average expected return on plan assets, which is weighted by the fair value of the respective plan assets. Plan assets for funded benefit obligations primarily comprise equities, fixed-income securities and real estate. They do not include financial instruments issued by Merck Group companies or real estate used by Group companies.

The balance sheet item "Provisions for pensions and other post-employment benefits" can be broken down as follows:

EUR million	2003	2002
Present value of benefit obligations funded by provisions	933.2	907.6
Present value of funded benefit obligations	421.8	327.6
Present value of all benefit obligations	1,355.0	1,235.2
Fair value of plan assets of all funds	-308.8	-250.4
Funded status	1,046.2	984.8
Unrecognized actuarial losses (gains)	-137.0	-76.8
Deferred pension payments	28.7	48.8
Other changes	-6.6	7.0
Provisions for pensions and other post-employment benefits	931.3	963.8

Actuarial gains and losses arising from changes in actuarial assumptions are recognized using the 10% corridor rule, under which actuarial gains or losses are only recognized in the income statement if they exceed the greater of 10% of the present value of the defined benefit obligation and 10% of the fair value of plan assets. Actuarial gains and losses outside the 10% corridor are spread over the expected remaining periods of service of the participating employees.

During the period under review, the balance sheet item "Provisions for pensions and other post-employment benefits" changed as detailed in the following table, which also gives a breakdown of the amounts recognized in income:

EUR million	2003	2002
Provisions for pensions as of Jan. 1	963.8	934.2
Amounts recognized in income		
Current service cost	39.3	48.5
Past service cost	0.2	0.5
Interest cost on pension obligations	68.1	47.1
Expected return on plan assets	-16.5	-20.6
Net recognized actuarial gains (losses) for the period	8.1	2.2
Other effects	-8.3	-
Pension payments during the period/contributions to funds	-92.0	-43.2
Changes in deferred amounts	-20.1	-7.3
Currency translation, changes in companies consolidated and other changes	-11.3	2.4
Provisions for pensions as of Dec. 31	931.3	963.8

The item "contributions to funds" includes a transfer of pension liabilities in the amount of EUR 38 million to a pension fund.

In the year under review, the actual return on plan assets amounted to EUR 24.2 million (previous year: EUR 3.6 million).

Net amounts recognized in the balance sheet as of December 31, 2003 in accordance with IAS 19 amounted to EUR 902.6 million (previous year: EUR 908.0 million). They comprise provisions for pensions in the amount of EUR 931.3 million, less deferred expenses for pensions and other post-employment benefits amounting to EUR 28.7 million.

The cost of current contribution payments during the year under review for defined contribution plans that are financed exclusively by external funds and that do not give rise to any obligations for Merck Group companies other than the payment of contributions amounted to EUR 11.3 million (previous year: EUR 4.7 million).

Apart from the interest component of benefit obligations funded by provisions, which is disclosed in the financial result, the relevant costs of defined benefit and defined contribution plans are contained in the operating result of the business sectors.

◀ [11] Other provisions

EUR million	Balance as of Jan. 1, 2003	Currency translation	Utilizations	Additions	Reversals	Changes in companies con- solidated/ad- justments/Other	Balance as of Dec. 31, 2003
Provisions for taxes	65.3	-2.6	-52.3	69.2	-10.6	1.7	70.7
Provisions for vitamin business risks	74.5	-	-8.7	3.1	-1.9	-	67.0
Provisions for litigation risks	23.3	-0.1	-3.4	8.9	-3.2	0.2	25.7
Provisions for pending invoices	47.6	-0.9	-40.9	62.1	-3.2	9.9	74.6
Obligations relating to staff costs	233.3	-8.2	-135.7	181.7	-10.9	18.7	278.9
Provisions for commissions and rebates	20.4	-1.4	-15.0	21.8	-3.6	26.5	48.7
Provisions for restructuring	13.8	-0.3	-7.1	67.7	-1.0	-2.7	70.4
Other provisions	181.5	-10.0	-60.2	71.2	-17.4	-17.0	148.1
Total	659.7	-23.5	-323.3	485.7	-51.8	37.3	784.1

In accordance with IAS 37, provisions for legal or de facto obligations are reported in the balance sheet if the net cash used for the payment of liabilities can be reliably estimated. The carrying value of provisions is based on the amounts used to cover future payment obligations, recognizable risks and uncertain obligations of the Group. Provisions are discounted where required. Provisions relating to risks from the vitamin business have been reported separately. These provisions relate to the risks from the antitrust proceedings and from possible claims arising from breaches of purchase obligations. Other provisions include provisions for contributions, levies and fees, as well as uncertain obligations associated with environmental measures.

In common with a number of other pharmaceutical companies in the U.S.A., our American subsidiary Dey Inc. was sued for having allegedly falsely reported certain price information. The plaintiffs argue that as a result of this, refunds to physicians and pharmacists for drugs from the Medicaid and Medicare health insurance programs were higher than the actual purchase costs. They argue that this resulted in financial losses. In addition, it is claimed that Dey and many other pharmaceutical companies illegally used this difference between actual costs and the amount to be reimbursed as a marketing incentive. Nine U.S. states have filed actions against Dey. In addition, ten class actions have been filed by patients and institutions who paid additional prescription fees. Dey and the other companies are mounting a defense against the claims. In a case that has already been concluded by a settlement with the State of Texas, Dey made a payment of USD 18.5 million without acknowledging any legal obligation. These settlement payments and the related expenses for legal costs are included under exceptional items (see Note (26) Exceptional items). As the total number of lawsuits is not known and proceedings are at a very early stage, it is not possible at present to reliably estimate the potential risks. If the final judgement is not in Merck's favor, this could result in material liabilities in the mid term. We will continue to review the need for provisions depending on the further development of proceedings.

▶

◀ **[12] Liabilities** The Merck Group's current liabilities are generally carried at their repayment amount. Any difference between the amount paid out and the amount recoverable at final maturity is amortized. Foreign currency liabilities are translated at their closing rates. Hedged items in foreign currencies are also valued at the closing rate in accordance with IAS 21.

The following liabilities were collateralized as of the balance sheet date:

EUR million	secured by real property liens		secured by other liens	
	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2002
Bank loans and overdrafts	24.8	24.6	13.0	20.8
Other liabilities	0.6	0.6	-	-
	25.4	25.2	13.0	20.8

◀ [13] Financial obligations

EUR million	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2003	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2002
Bank loans and overdrafts	651.8	682.5	1,334.3	1,009.5	1,260.8	2,270.3
Commercial paper obligations	420.0	-	420.0	55.0	-	55.0
Liabilities from finance lease obligations	1.6	8.3	9.9	2.3	9.3	11.6
	1,073.4	690.8	1,764.2	1,066.8	1,270.1	2,336.9

Bank loans and overdrafts:

Financing commitments from banks to Merck Group are composed as follows:

EUR million	Financing commitments from banks	Utilization as of Dec. 31, 2003	Interest	Due
Syndicated loan 1998	639.1	520.1	variable	2005
Syndicated loan 2003	700.0	-	variable	2008
Bilateral credit facilities with banks	194.8	28.1	fixed/variable	2005
Bilateral credit facilities with banks	441.0	13.4	variable	2006
Bilateral credit facilities with banks	42.3	42.3	fixed	2007
Bilateral credit facilities with banks	77.0	77.0	fixed/variable	2008
Bilateral credit facilities with banks	1.6	1.6	fixed	> 2008
Various credit facilities	1,495.3	651.8	fixed/variable	< 1 Jahr
	3,591.1	1,334.3		

Syndicated loans and bilateral credit facilities are generally utilized on a revolving basis with maturities of between 1 and 3 months. Interest charges are mainly based on a variable, currency-dependent base rate with an agreed margin. Due to the long-term financing commitments, the utilization of the aforementioned syndicated loans and bilateral credit facilities due in 2005 or afterwards is disclosed under bank loans and overdrafts with a time to maturity of over 1 year.

The current and non-current liabilities of the Merck Group to banks are denominated in the following currencies:

	Dec. 31, 2003	Dec. 31, 2002
Euros	34.1%	47.7%
U.S. dollars	29.7%	24.6%
Pounds sterling	15.1%	9.2%
Swiss francs	9.5%	6.8%
Yen	4.9%	5.7%
Other currencies	6.7%	6.0%
	100.0%	100.0%

Commercial paper program: In order to meet short-term capital requirements, Merck KGaA employed a commercial paper program with a volume of EUR 500.0 million in the year under review. At the reporting date, utilization of the program amounted to EUR 420 million.

Leases: Liabilities from finance lease obligations represent the discounted amount of future payments arising from finance leases. This position primarily relates to liabilities from finance leases for land, buildings and vehicles.

◀ [14] Trade accounts payable

EUR million	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2003	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2002
to associates	7.8	-	7.8	5.8	-	5.8
to other affiliates	1.7	-	1.7	1.7	-	1.7
to other companies	454.6	4.2	458.8	495.3	2.0	497.3
	464.1	4.2	468.3	502.8	2.0	504.8

◀ [15] Other liabilities

EUR million	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2003	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2002
to associates	-	-	-	-	-	-
to other affiliates	7.6	-	7.6	8.9	-	8.9
Advances received from customers	7.2	-	7.2	12.4	0.2	12.6
Payroll liabilities	68.4	-	68.4	63.6	-	63.6
Tax liabilities	151.4	-	151.4	137.2	0.2	137.4
Derivative financial instruments	0.7	-	0.7	0.6	-	0.6
Liabilities to general partner E. Merck OHG	91.1	-	91.1	313.4	-	313.4
Loans received from third parties	16.4	93.9	110.3	16.4	85.9	102.3
Deferred income	46.3	0.1	46.4	54.2	43.1	97.3
Miscellaneous	87.1	2.5	89.6	129.5	1.0	130.5
	476.2	96.5	572.7	736.2	130.4	866.6

As of the balance sheet date, deferred income includes EUR 43.1 million relating to the payments made in 2000 by Bracco for licenses and contractual restraint of competition. These payments are deferred over a remaining period of one year. Miscellaneous liabilities primarily include interest liabilities.

- ◀ [16] **Deferred tax liabilities** Deferred tax liabilities result from differences in the carrying amounts in the financial and tax accounts of Group companies as well as from consolidation measures, in so far as these differences reverse over time. Deferred tax liabilities are recognized in accordance with IAS 12 (rev. 2000). In accordance with the liability method, the tax rates that are applicable or enacted as of the balance sheet date are applied. Additional explanatory notes on deferred tax liabilities are contained in section (28) 'Income tax'.

Notes to the Income Statement

To standardize accounting policies, certain customer-related expenses in the Generics division relating to sales were recognized as sales reductions in accordance with IAS 18 in some countries in the current fiscal year. Corresponding expenses amounting to EUR 73.5 million were therefore reclassified from marketing and selling expenses to revenue reductions. This change in classification has no effect on the operating result or the items below it in the income statement.

- ◀ **[17] Sales** Sales are considered realized when the trade and services owed have been rendered. Sales also include revenue from services, but the volume involved is insignificant. Sales are presented by business sector and region in the enclosed 'Segment Reporting' section.
- ◀ **[18] Cost of sales** The cost of sales also includes the cost of goods purchased for resale. In accordance with IAS 2, the cost comprises overheads, including depreciation charges on production facilities, in addition to directly attributable costs, such as the cost of materials, staff and energy costs.
- ◀ **[19] Marketing and selling expenses** In addition to the cost of sales and marketing departments and of the field sales force, marketing and selling expenses include advertising, logistics and license costs. Suspense items for oncharged freight expenses amounting to EUR 41.6 million have been deducted from marketing and selling expenses (previous year: EUR 48.9 million). In addition, the balance from commissions paid amounting to EUR 28.6 million (previous year: EUR 30.5 million) and commission earnings amounting to EUR 21.4 million (previous year: EUR 24.2 million) are also included in this item.
- ◀ **[20] Administration expenses** Staff costs and material expenses of management and administration functions are disclosed under this item unless they have been charged to other cost centers as internal services.
- ◀ **[21] Other operating income and expenses** Other operating income and expenses can be broken down as follows:

EUR million	2003	2002
Inventory adjustments	-71.2	-58.2
Exchange differences from operating activities	5.4	-10.4
Losses from disposal of assets/special write-downs	-22.2	-18.6
Write-downs on receivables	-5.9	-7.4
Project costs	-16.3	-19.9
Premiums, fees and contributions	-37.3	-33.4
Other operating expenses	-155.2	-112.1
Gains from disposal of assets	10.1	35.0
Other operating income	92.6	81.7
	-200.0	-143.3

Other operating expenses primarily include expenses arising from production development, environmental protection, damage/loss, and expenses relating to litigation risks. They also include expenses relating to the recognition of provisions for the partial early retirement program and restructurings. Other operating income primarily includes gains from the release of provisions and prior period income.

◀ **[22] Research and development** The breakdown of research and development by business sectors and regions is disclosed under 'Segment Reporting'. In addition to the costs of research departments and process development, this item also includes the cost of purchased services and the cost of clinical trials. The costs of research and development are expensed in full in the period in which they are incurred. Development expenses in the Pharmaceuticals business sector cannot be capitalized since the high level of risk up to the time that pharmaceutical products are marketed means that the requirements of IAS 38 are not satisfied in full. Costs incurred after regulatory approval are insignificant. In the same way, the risks involved until products are marketed means that development expenses in the Chemicals business sector and Laboratory Distribution cannot be capitalized. Refunds are eliminated against research costs for research and development of EUR 8.6 million (previous year: EUR 13.0 million).

◀ **[23] Patent and license revenues** The amounts reported as patent and license revenues relate principally to income for the pharmaceutical active substances omeprazole, metformin and bisoprolol, as well as to licensing income from the license agreement with Bracco.

◀ **[24] Investment result**

EUR million	2003	2002
Dividend income from associates	12.4	17.2
Other investment income	3.2	6.3
	15.6	23.5

◀ **[25] Amortization of goodwill**

EUR million	2003	2002
Pharmaceuticals	-65.6	-61.7
Chemicals	-6.9	-15.6
Laboratory Distribution	-39.1	-43.3
	-111.6	-120.6

◀ **[26] Exceptional items** Exceptional items are composed as follows:

EUR million	2003	2002
Expenses for restructuring programs in France	-71.3	-
Write-downs of goodwill from Theramex	-50,0	-
Expenses relating to the termination of contract manufacturing with GlaxoSmithKline	-50,5	-
Settlement payments and legal costs for the Dey Inc. drug pricing lawsuit	-25,7	-
Expenses for vitamin business risks	-	-93.0
Cost of restructuring EC business, Singapore	-	-11.2
Exchange rate gain from capital retransfer (liquidation of a subsidiary in the United Kingdom)	-	50.0
Others	-	-2.5
	-197.5	-56.7

Expenses in connection with the termination of contract manufacturing with GlaxoSmithKline include compensation payments and losses from disposals of assets. Further information about the Dey Inc. drug pricing lawsuit is contained in Note (11) Other provisions.



◀ [27] Financial result

EUR million	2003	2002
Interest income from loans	1.0	5.8
Other interest and similar income	12.0	22.4
Interest and similar expenses	-77.5	-114.3
	-64.5	-86.1
Interest component of the addition to pension provisions and other provisions for staff costs	-53.2	-53.2
Measurement of interest rate derivatives	-	3.4
Exchange rate differences from financing activities	2.3	-11.8
	-115.4	-147.7

◀ [28] Income tax

EUR million	2003	2002
Taxes in the period under review on operating activities	-237.7	-219.0
Taxes in the period under review on exceptional items	25.9	1.6
Taxes for other periods	-1.9	2.7
Deferred taxes on operating activities	-7.7	18.1
Deferred taxes on exceptional items	16.5	0.2
	-204.9	-196.4
Tax rate	48%	48%
Tax rate before exceptional items	40%	42%

The tax expense consists of corporation and trade income taxes for the companies domiciled in Germany as well as comparable income taxes for foreign companies. Other taxes besides income taxes are contained in the other operating income and expenses. The deferred taxes relate to temporary differences between the carrying values in the companies' tax bases and the carrying values in the consolidated financial statements using the liability method. As a result of changes in tax rates at individual companies, total deferred tax income of EUR 9.4 million was recorded.

The reconciliation between deferred tax assets and liabilities shown in the balance sheet and deferred taxes in the income statement is presented below:

EUR million	2003	2002
Change in deferred tax assets (balance sheet)	-14.0	21.9
Change in deferred tax liabilities (balance sheet)	26.8	16.6
Deferred taxes credited/debited to equity	0.3	-19.3
Changes in companies consolidated/Currency translation	-4.3	-0.9
Deferred taxes (income statement)	8.8	18.3

As of the balance sheet date, corporation tax loss carryforwards at Merck KGaA amount to EUR 37.0 million; trade tax loss carryforwards amount to EUR 97.0 million. Income tax loss carryforwards at subsidiaries amount to EUR 118.5 million. In 2003, the income tax burden was reduced by EUR 6.8 million due to the utilization of tax loss carryforwards and tax credits. Deferred tax assets are recognized for tax loss carryforwards only if realization of the related tax benefit is probable. This resulted in total deferred tax assets of EUR 6.5 million (previous year: EUR 22.8 million). The major part of these tax loss carryforwards either have no expiry date or can be carried forward for up to 20 years. Deferred tax assets were not recognized for losses or loss carryforwards totaling EUR 212.5 million at Merck KGaA and its subsidiaries, since future realization of the related tax benefits is currently not expected. Net deferred tax assets amounting to EUR 172.7 million were carried for other temporary differences.

Deferred tax assets and liabilities are attributable to the following balance sheet items:

EUR million	Deferred taxes 2003 assets	liabilities
Intangible assets	6.8	30.4
Property, plant, and equipment	-	70.1
Long-term investments	0.4	15.1
Inventories	51.8	16.8
Receivables/other assets	8.5	1.2
Provisions for pensions and other post-employment benefits	60.9	2.5
Other provisions	83.7	2.9
Liabilities	4.1	2.4
Tax loss carryforwards	6.5	-
Other	4.2	5.0
Offsetting	-47.7	-47.7
Total deferred taxes	179.2	98.7

In accordance with IAS 12.81, the current tax expense must be compared with the tax expense which would theoretically be incurred by applying the applicable tax rates to the disclosed consolidated profit before tax. Tax is calculated using the tax rates valid for the relevant legal forms of all German and foreign companies in their respective countries. As the following reconciliation shows, the current tax expense in the Group in the year under review is EUR 70.8 million higher than the tax expense which would be incurred by merely using the tax rates applicable to the German and foreign Group companies:

EUR million	2003	2002
Consolidated profit before tax	422.6	411.6
Tax expense using the relevant tax rates applicable to all German and foreign companies	-134.1	-147.1
Theoretical tax rate	32%	36%
Tax effect by non-deductible amortization of goodwill	-45.4	-30.2
Tax effect by Group companies with a negative consolidated contribution	-39.7	-28.8
Taxes for other periods	-1.9	2.7
Tax effect by non-deductible expenses and tax-free income/Miscellaneous	16.2	7.0
Effective tax expense according to income statement	-204.9	-196.4
Effective tax rate	48%	48%

- ◀ **[29] Minority interest** Minority interest in net profit principally includes the minority interests in Merck Marker Ltd., Pakistan, Merck Pharmaceuticals China Group, as well as the listed subsidiaries Merck Ltd., India and Merck Indonesia Group.
- ◀ **[30] Earnings per share** Earnings per share are calculated by dividing the net profit after minority interest by a theoretical number of shares (180.6 million). The use of a theoretical number of shares takes into account the fact that the general partner's capital is not evidenced by certificates. Given that since the capital increase of July 4, 2003, the share capital in the amount of EUR 128.7 million is composed of 49,499,999 shares, the general partner's capital in the amount of EUR 363.2 million is composed of 139,699,997 theoretical shares. However, in accordance with IAS 33, the 4,499,999 actual and 12,699,997 of the general partner's theoretical new shares issued on July 4, 2003 may only be recognized on a time proportionate basis, i.e. up to one half, meaning that there are a total of 180.6 million theoretical shares.

Notes to the Segment Reporting

The classification of asset and income figures and other key figures by business sector or by region in accordance with IAS 14 (rev. 1997) is presented in 'Segment Reporting'. Segmentation was performed in accordance with the internal reporting of the Merck Group. The operating segments of the business sectors are described in detail in the business sector sections in the Annual Report. Transfer prices for intragroup sales are determined on an arm's-length basis. There were no substantial internal relationships between the business sectors, with the exception of intragroup sales between the Chemicals and Laboratory Distribution business sectors reported in segment reporting. In the Segment Reporting, the United States and Canada are combined to form a single region 'North America', as the two countries are managed as a single territory in the Merck Group's internal reporting.

Operating assets included in 'Segment Reporting' were as follows:

EUR million	Dec. 31, 2003	Dec. 31, 2002
Total assets of the Merck Group	6,982.1	7,510.9
Monetary assets (cash and cash equivalents, loans, securities)	-311.6	-353.1
Non-operating receivables from related parties and tax receivables	-328.1	-362.5
Trade accounts payable	-468.3	-504.8
Operating assets	5,874.1	6,290.5

Notes to the Cash Flow Statement

We define free cash flow as the total net cash flows from operating and investing activities. It is used as an internal control parameter for measuring the liquidity contributed by our business sectors.

- ◀ **[31] Net cash flows from operating activities** Net cash flows from operating activities include payments for taxes amounting to EUR 144.0 million (previous year: EUR 238.5 million) as well as interest expenses of EUR 67.3 million (previous year: EUR 97.7 million) and interest income of EUR 11.8 million (previous year: EUR 36.7 million). In addition to the development of earnings, including revenue from Schwarz Pharma for sales of generic products containing the active substance omeprazole, the reduction in working capital had a positive effect on cash flow.
- ◀ **[32] Net cash flows from investing activities** The acquisition of Lamberts Healthcare Ltd., UK and the remaining 21% of Merck Electronic Chemicals Taiwan led to cash outflows of EUR 22.8 million and EUR 8.0 million, respectively. In the previous year, income from the disposal of assets contained the proceeds from a repayment made on the loan to Bracco (EUR 76.6 million) and the selling proceeds from the remaining receivable (EUR 322.1 million).

- ◀ **[33] Net cash flows from financing activities** Dividends paid and transfers of profits in accordance with the Articles of Incorporation disclosed as cash outflows from financing activities were broken down as follows in the fiscal year:

EUR million	2003	
Total dividend payments		
Dividends to shareholders	-45.0	
Dividends to external shareholders	-8.9	-53.9
Net profits transferred by Merck KGaA to E. Merck OHG		
Profit transfer in accordance with the Articles of Incorporation from E. Merck OHG to Merck KGaA	10.6	
Profit transfer in accordance with the Articles of Incorporation from Merck KGaA to E. Merck OHG	-97.3	
Appropriation by E. Merck OHG to the reserves of Merck KGaA	14.6	-72.1
Profit transfer from Merck & Cie to E. Merck OHG		-53.7
Total dividend payments and profit transfers		-179.7

This resulted in free cash flow for the year after dividends and profit transfers of EUR 262.3 million.

The funds from the capital increase completed in July were mainly used for debt redemption.

- ◀ **[34] Cash and cash equivalents** The composition of cash and cash equivalents is presented under 'Notes to the Balance Sheet'.

Other Disclosures

[35] Financial instruments We use derivative financial instruments exclusively to hedge currency and interest rate positions, and thereby minimize currency risks and financing costs caused by exchange rate or interest rate fluctuations. The instruments used are marketable forward exchange contracts and interest rate swaps. The use of such derivatives contracts is governed by internal regulations, and derivative transactions are subject to continuous risk management procedures. Trading, settlement and control functions are strictly separated, and this separation is monitored by our internal audit department. Derivatives contracts are only concluded with prime-rated banks and are restricted to the hedging of our business operations and related financing transactions.

The following derivative financial positions were held as of the balance sheet date:

EUR million	Nominal volume Dec. 31, 2003	Dec. 31, 2002	Fair value Dec. 31, 2003	Dec. 31, 2002
Forward exchange contracts	307.4	198.5	12.1	13.4
Interest rate swaps	22.3	24.1	-0.3	-0.6
	329.7	222.6	11.8	12.8

The nominal volume is the aggregate of all buy and sell amounts relating to derivatives contracts. The fair values result from the valuation of open positions at market prices, ignoring any opposite movements in the value of the underlyings. They correspond to the income or expenses which would result if the derivatives contracts were closed out as of balance sheet date. The fair values are calculated on the basis of quoted prices or current market data provided by a recognized information service.

Derivative financial instruments are recognized at fair values in the balance sheet under other receivables and other assets or under other liabilities. Gains and losses on the fair value of derivatives and underlyings are usually recognized directly in the income statement. If, in the case of future cash flows being hedged, the provisions for hedge accounting in accordance with IAS 39.158 are fulfilled, gains and losses on the fair value of derivatives are recognized in equity until the underlying transaction occurs. These amounts are only reclassified from equity and carried to the income statement after accounting for the underlying transaction. Amounts reclassified to the income statement are either recognized in the operating result, or in the financial result if liabilities have been hedged.

The maturity structure of the hedging transactions (nominal volume) is as follows as of the balance sheet date:

EUR million	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2003	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2002
Forward exchange contracts	282.0	25.4	307.4	198.5	-	198.5
Interest rate swaps	-	22.3	22.3	-	24.1	24.1
	282.0	47.7	329.7	198.5	24.1	222.6

The forward exchange contracts that are entered into to reduce the exchange rate risk have a total nominal volume of EUR 307.4 million and primarily serve to hedge fluctuations in the exchange rates of the JPY (EUR 156.4 million), USD (EUR 39.9 million) and CAD (EUR 25.6 million) to euro, and fluctuations in the exchange rate of the EUR to the USD (EUR 21.2 million). Forecast transactions are only hedged if the occurrence can be assumed to be highly probable. The nominal volume of future transactions amounted to EUR 110.9 million at the balance sheet date. The occurrence of hedged items is expected within the next 12 months. In the fiscal year, a gain of EUR 7.8 million on the remeasurement of derivatives to fair value was taken directly to equity and EUR 7.7 million was removed from equity and included in net profit. This primarily relates to the hedging of future sales in Yen.

EUR million	Nominal volume Dec. 31, 2003	Dec. 31, 2002	Fair value Dec. 31, 2003	Dec. 31, 2002
Hedging of forecast transactions	110.9	99.7	6.5	6.7
Hedging of recognized transactions	196.5	98.8	5.6	6.7
Total forward exchange contracts	307.4	198.5	12.1	13.4

EUR 22.3 million of JPY financial liabilities was changed from floating to fixed rates to hedge short-term interest rate risks. Overall, the interest rate structure of the Merck Group's assets and liabilities is presented in the following table. The financial obligations secured by interest rate swaps are recognized according to the effect of the swaps:

EUR million	Fixed-rate	Floating-rate	Non-interest-bearing	Total Dec. 31, 2003	Fixed-rate	Floating-rate	Non-interest-bearing	Total Dec. 31, 2002
Loans granted	10.7	-	-	10.7	10.6	-	-	10.6
Cash and cash equivalents	87.2	149.8	60.8	297.8	96.4	177.2	65.8	339.4
Other receivables/assets	11.3	8.7	319.0	339.0	11.3	9.3	400.7	421.3
Financial obligations	198.1	1,566.1	-	1,764.2	145.0	2,191.9	-	2,336.9
Other liabilities	115.4	110.8	346.5	572.7	107.7	330.6	428.3	866.6

The trade accounts receivable and payable not included in the table are for the most part non-interest-bearing.

A theoretical credit risk for the existing derivative instruments only applies to the amount of the positive fair values. As of the balance sheet date, these amount to EUR 12.1 million (previous year: EUR 13.4 million) and result exclusively from forward exchange contracts. As the underlying contracts are only concluded with prime-rated banks, we do not believe that these financial instruments involve any actual credit risk. For financial instruments carried on the face of the balance sheet, the fair values correspond to the carrying values unless stated otherwise in the notes to the individual balance sheet items. Specific write-downs are charged to cover existing credit risks of financial instruments originated by the company. In addition, the broad-based business structure of the Merck Group means that there is no particular concentration of credit risks as regards either customers or specific countries.

[36] Contingent liabilities

EUR million	Dec. 31, 2003	thereof subsidiaries	Dec. 31, 2002	thereof subsidiaries
Issuance and endorsement of bills	0.1	-	0.4	-
Guarantees	287.6	1.8	370.3	-
Warranties	4.3	-	4.9	-
Other contingent liabilities	14.9	-	13.3	-

In 2000, Merck sold its interest in Bracco, Italy. It was agreed that a portion of the purchase price could be paid in installments. These outstanding payments have been secured by way of a bank guarantee in favor of Merck. In fiscal year 2002, Merck KGaA sold the residual claim from Bracco to a financial institute (revenues from the disposal: EUR 322.1 million). In this connection, Merck KGaA assumed a guarantee to hedge against the respective residual claim, which amounted to EUR 277.9 million as of December 31, 2003 (previous year: EUR 366.5 million) and is carried under guarantees.

[37] Other financial obligations

EUR million	Dec. 31, 2003	thereof subsidiaries	Dec. 31, 2002	thereof subsidiaries
Orders for capital spending on property, plant, and equipment	25.0	-	75.4	-
Future rental and operating lease payments	189.0	-	184.6	-
Long-term purchase commitments	0.2	-	-	-
Other financial obligations	96.0	5.1	25.6	7.4
	310.2	5.1	285.6	7.4

Other financial commitments are carried at nominal value. Liabilities from lease agreements are composed as follows:

EUR million	Remaining maturity less than 1 year	Remaining maturity 1-5 years	Remaining maturity more than 5 years	Total Dec. 31, 2003
Present value of future lease payments from finance leases	1.6	5.0	3.3	9.9
Interest component of finance leases	0.6	0.6	0.5	1.7
Future finance lease payments	2.2	5.6	3.8	11.6
Future operating lease payments	28.7	58.1	26.5	113.3

[38] Staff costs/Material costs Staff costs are composed as follows:

EUR million	2003	2002
Wages and salaries	1,442.7	1,463.9
Compulsory social security contributions and special financial assistance	250.8	248.9
Pension expenses	108.8	99.7
	1,802.3	1,812.5

Material costs amounted to EUR 2,876 million (previous year: EUR 3,069 million).

[39] Corporate Governance The Statement of Compliance in accordance with section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) was published on our Web site in December 2003 (www.corporategovernance.merck.de), where it is always accessible.

Subject to the agreement of the Annual General Meeting to the dividend payment of EUR 0.80 per share, the total remuneration of the Supervisory Board amounts to EUR 278 thousand.

[40] Related party disclosures Related parties as defined by IAS 24 are the members of the Executive Board, members of the Merck family and the companies E. Merck OHG, E. Merck Beteiligungen OHG, Emanuel Merck GmbH and E. Merck Vermögens KG.

As of December 31, 2003, there were liabilities by Merck KGaA and Merck & Cie, Altdorf, to E. Merck OHG in the amount of EUR 91.1 million (previous year: EUR 313.4 million liabilities). The balances result mainly from the profit transfers by Merck & Cie to E. Merck OHG on the one hand, and the reciprocal profit transfers and ongoing settlements between Merck KGaA and E. Merck OHG on the other. Merck KGaA was owed receivables in the amount of EUR 4.9 million by E. Merck Vermögens KG (previous year: receivables EUR 5.3 million). In addition, Merck KGaA had receivables from E. Merck Beteiligungen OHG in the amount of EUR 0.2 million at the balance sheet date, Merck KGaA had no receivables from E. Merck Beteiligungen OHG (previous year: EUR 0.4 million). In total, an average of EUR 166.7 million liabilities was owed to related parties in the fiscal year (previous year: EUR 184.0 million), these liabilities were subject to standard market interest rates. There were no further material transactions with related parties in 2003.

The remuneration of the Executive Board of Merck KGaA is paid by the general partner, E. Merck OHG, and recorded as an expense in its income statement. In the current year, the total remuneration consists of salaries (fixed portion) totaling EUR 2.5 million, variable remuneration of EUR 5.7 million and appropriations to pension provisions of EUR 1.3 million. Profit participation is based on the three-year rolling average of profit after tax, i.e., for 2003, 2002 and 2001. The members of the Executive Board hold 198,000 stock options from the first tranche and 209,750 stock options from the second tranche of Merck KGaA's stock option program (refer also to note (9)).

[41] Discontinuing operations Merck intends to sell its 100% interest in VWR International Corp. (USA) and has entered into corresponding negotiations. The necessary resolutions were adopted in mid-December. Merck will have divested its entire Laboratory Distribution business sector when this interest is sold. In the accompanying financial statements, VWR is included as before. The table below shows the effect of the sale of VWR on the accompanying financial statements. In the event of deconsolidation of VWR Corp. and its subsidiaries, in addition to the effects of deconsolidation (for instance, intragroup sales), amounts would have to be recognized that are incurred in Laboratory Distribution at Group level and attributed to this segment (for instance, borrowing costs).

EUR million	VWR companies 2003	Consoli- dation/ Group classi- fication 2003	Contribution by the Laboratory Distribution busi- ness sector to consolidated financial state- ments 2003	Contribution by the Laboratory Distribution busi- ness sector to consolidated financial state- ments 2002
Sales	2,427.3	-228.2	2,199.1	2,464.6
Expenses	-2,348.7	228.7	-2,120.0	-2,380.3
Operating result	78.6	0.5	79.1	84.3
Profit before tax	69.8	-16.1	53.7	46.2
Tax	-33.9	-7.6	-26.3	-22.2
Profit after tax	35.9	-8.5	27.4	24.1
Assets	1,327.6	-247.2	1,080.4	1,236.9
Liabilities and provisions	554.6	-242.5	312.1	462.7

Free cash flow for the Laboratory Distribution business sector amounts to EUR 126.0 million (previous year: EUR 81.2 million). This includes cash inflows from operating activities in the amount of EUR 134.3 million (previous year: EUR 118.0 million) and cash outflows from financing activities in the amount of EUR -8.3 million (previous year: EUR -36.8 million).

[42] Events after the balance sheet date Together with its partner Biomet Inc., Merck has entered into an agreement to sell its 50% interest in the 50/50 BioMer C. V. joint venture to Biomet Inc., for USD 300 million. Merck expects a one-time gain of USD 70 million from this transaction. The sale still requires the approval of the European Commission.

The Executive Board of Merck KGaA
Darmstadt, January 28, 2004



Bernhard Scheuble



Michael Römer



Michael Becker



Thomas Schreckenbach



Jan Sombroek

Auditor's Report

"We have audited the consolidated financial statements, comprising the balance sheet, the income statement, the statement of changes in net equity, the cash flow statement as well as the notes to the consolidated financial statements prepared by Merck Kommanditgesellschaft auf Aktien for the Merck Group for the business year from January 1 to December 31, 2003. The preparation and the content of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit of the consolidated financial statements in accordance with German auditing regulations and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW) and in supplementary compliance with International Standards on Auditing (ISA). Those standards require that we plan and perform the audit such that it can be assessed with reasonable assurance whether the consolidated financial statements are free of material misstatements. Knowledge of the business activities and the economic and legal environment of the Group and evaluations of possible misstatements are taken into account in the determination of audit procedures. The evidence supporting the amounts and disclosures in the consolidated financial statements is examined on a test basis within the framework of the audit. The audit includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the net assets, financial position, results of operations and cash flows of the Group for the business year in accordance with International Financial Reporting Standards.

Our audit, which also extends to the group management report prepared by the Company's management for the business year from January 1 to December 31, 2003, has not led to any reservations. In our opinion on the whole the group management report provides a suitable understanding of the Group's position and suitably presents the risks of future development. In addition, we confirm that the consolidated financial statements and the group management report for the business year from January 1 to December 31, 2003, satisfy the conditions required for the company's exemption from its duty to prepare consolidated financial statements and the group management report in accordance with German law."

Mannheim, January 29, 2004

KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft



Walter
Wirtschaftsprüfer



Heublein
Wirtschaftsprüfer

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- ▶ **More information** about Merck can be found on the Internet at www.merck.de and in the following brochures, which you can read online or order (in German and English):

Responsibility for Employees, the Environment, and the Community Report 2003

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Special-Effect Pigments A New Colour Dimension

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Netzwerk Partnerschaft in der Region Darmstadt (only available in German)

- ▶ You can order these brochures from Corporate Communications, Merck KGaA, D-64271 Darmstadt, or at the following e-mail address: corpcom@merck.de.

- ▶ The Merck Annual Report 2003 is published in German and English. Both reports are available as online versions on the Internet at www.financialreports.merck.de.

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Dates | 2004

Annual Press Conference
Monday, February 16

Annual General Meeting
Friday, March 26

Interim Report 1st Quarter
Thursday, April 29

Interim Report 2nd Quarter
Tuesday, July 27

Autumn Press Conference
Interim Report 3rd Quarter
Wednesday, October 27

