

MANAGEMENT REPORT OF THE MERCK GROUP 2010

15	Overall economic situation
17	Financial position and results of operations
30	Corporate responsibility
39	Merck in the capital market
47	Merck Serono
63	Consumer Health Care
69	Merck Millipore
77	Performance Materials
84	Corporate and Other
86	Risk report
95	Report on expected developments
106	Subsequent events

OVERALL ECONOMIC SITUATION

The global economy recovered from the most severe crisis since the Second World War. In the pharmaceutical sector, emerging countries are gaining ground. The chemical industry, especially that of Germany, recorded an exceptionally good year in 2010.

Global economy is regaining momentum – Uncertainty remains

The Organization for Economic Cooperation and Development (OECD) reported that economic growth of its 34 member states totaled 2.8% in 2010. Gross domestic product (GDP) of the United States, the world's largest economy, grew by 2.7%, while gross national product (GDP) of the eurozone countries increased by 1.7%. Japan can look back at growth of 3.7%. On the positive side, the OECD noted that company profits, which had grown sharply, were reinvested. However, the renewed drop in real estate prices in the United States as well as growing tension in the foreign exchange markets had a noticeably negative impact.

The International Monetary Fund (IMF), which reports on the development of global economic growth, calculated an increase of 4.8% in 2010. Accordingly, the industrialized countries recorded a 2.7% increase in GDP. However, industrial output in the industrialized countries is still notably below the pre-crisis level. By contrast, the emerging and developing countries achieved a GDP increase of 7.1%. This includes the BRIC countries, namely China (+10.5%), India (+9.7%), Brazil (+7.5%) and Russia (+4%).

The IMF considers the global growth achieved to be weak because the world economy is still recovering from the deepest recession since the Second World War. By contrast, thanks to government incentives, China achieved a self-sustaining recovery fueled mainly by private sector demand. However, economists are noting real estate speculation in some parts of China, which could lead to corrections. According to the IMF, Brazil is leading the recovery in Latin America, yet its economy is currently showing signs of possibly overheating.

The IMF takes a critical view of financial market stability, which had already declined in the first half of 2010 and uncertainty is gaining ground. Growing tensions in the international currency environment as well as the expansive monetary policy of the United States pose risks. Overall, the economic recovery slowed down as of the third quarter of 2010 according to the IMF. Private demand as well as the impact of government economic incentives ending were and still are uncertainties in this context. In 2010, inflation was under 1.5% in the industrialized countries and 5.75% in the economies of emerging countries.

Uncertainties remain despite the market recovery following the crisis

One-third of our global pharmaceutical sales are generated in the United States

Pharmaceutical markets of the industrialized countries facing stronger headwind

The pharmaceutical market research firm IMS Health reported global pharma sales in 2010 of around USD 840 billion, corresponding to growth of around 4.5%. Sales in the United States, the world's largest pharmaceutical market, totaled USD 310 billion. The more mature markets of the industrialized countries no longer showed particularly strong growth, also as an outcome of health care reforms, for example in France, Spain and Greece. Markets with high growth rates include the BRIC countries, namely Brazil, Russia, India and China, as well as Turkey and Indonesia. In 2010, emerging economics already accounted for 42% of the global growth of the pharmaceutical markets. According to IMS Health, it is becoming increasingly difficult to introduce new medicines to the market and to earn the corresponding returns on investment. IMS Health reports that in several countries, including Spain, Italy and China, regional or even local authorities are becoming increasingly influential alongside national authorities. This lengthens the time to market launch, if a product even makes it that far.

Chemical industry registers strong growth

According to the European Chemical Industry Council (Cefic), the European chemical industry grew by 10% in 2010 compared to 2009, which was a weak year due to the economic crisis. Germany was the growth engine of the European chemical industry, yet the industry has still not returned to the pre-crisis level of 2007. Global sales totaled EUR 1,871 billion in 2009. The 27 member states of the European Union were responsible for EUR 449 billion, or just 24% of the total. Accounting for 25.5% of European sales, Germany holds the leading position in this region. Globally, Asia is in first place with sales of EUR 834 billion, led by China with EUR 416 billion. Specialty chemicals, which include products from Merck, account for 26% of European chemical sales. According to Cefic data, consumer chemicals, which also include Merck products, account for 14% of European chemical sales. (The figures for 2010 will only be available after the publication of this report).

Growth weakened toward year-end since economic incentives ended in some countries.

Demand outside of Europe was the main growth driver according to Cefic.

The German Chemical Industry Association (VCI) calculated growth of nearly 18% to EUR 170 billion for Germany. The approximately 1,600 member companies invested EUR 6.4 billion in plant and buildings, and spent nearly EUR 9.4 billion on research and development.

The American Chemical Council (ACC) put the volume of the largest market, the United States, at well over USD 670 billion in 2010. Exports were an important component, generating a trade surplus of USD 3.7 billion, compared to a deficit of USD 100 million in 2009. According to the ACC, industrial output in the emerging countries rose by 12% in 2010.

FINANCIAL POSITION AND RESULTS OF OPERATIONS

The Group financial statements strongly reflect the acquisition of Millipore, which is helping us to position Merck as a life science company.

2010 – A successful and eventful business year

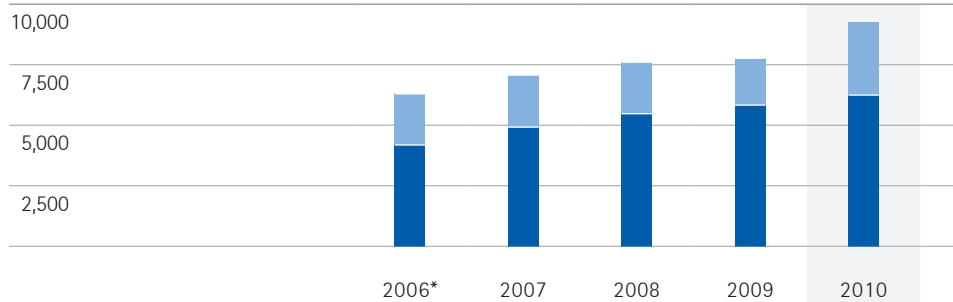
The financial and earnings position developed very positively in 2010. Following the acquisition of Serono of Switzerland within the Pharmaceuticals business sector in 2007, we also made a major acquisition in the Chemicals business sector by purchasing Millipore Corporation of the United States in 2010. This acquisition had a very strong impact on the 2010 financial statements. The revenues and expenses of the Millipore companies have been included in the income statement since July 2010. Moreover, the expenses from the purchase price allocation as well as one-time transaction and integration costs have been taken into account.

Organic sales growth of 7.9%
for the Merck Group

Product sales of the Merck Group rose in 2010 by 21% to EUR 8,929 million. Declining by 2%, royalty, license and commission income was slightly lower than in 2009. Total revenues, meaning the sum of product sales as well as royalty, license and commission income, rose by 20% to EUR 9,291 million. This sharp increase is related to the purchase of Millipore. However, our business also grew satisfactorily on an organic basis, i.e. adjusted for acquisition and currency effects, by 7.9%.

Total revenues by business sector

EUR million



*including Generics

■ Chemicals ■ Pharmaceuticals

Cost of sales increased by 18%. In the course of the purchase price allocation, the inventories from the Millipore acquisition were already recognized at fair values based on realizable sales revenues, and thus stepped up by EUR 86 million. This amount was fully expensed in cost of sales in the second half of 2010, and had a one-time negative impact on gross margin. Overall, gross margin rose by 21%. Marketing and selling expenses increased relatively sharply by 20% since the costs of the Millipore companies were included for six months compared to 2009. Excluding the acquisition and currency effects, the increase amounted to 7.9%.

Owing to the increasing significance of royalty, license and commission expenses, we disclose these separately below marketing and selling expenses. The 15% cost increase is sales-dependent and relates to the positive development of our Merck Serono products Rebif® and Eribitux®.

Royalty, license and commission income and expenses include the royalty, license and commission income reported in total revenues as well as the expenses for marketing licenses and to a lesser extent production licenses. The components are as follows:

Royalty, license and commission income and expenses by division in 2010

EUR million	Total	Merck Serono	Consumer Health Care	Merck Millipore	Performance Materials	Corporate and Other
Royalty + license expenses	-183	-163	-	-7	-13	-
Royalty + license income	340	323	2	7	8	-
Total	157	160	2	-	-5	-
Commission expenses	-297	-293	-	-3	-1	-
Commission income	22	22	-	-	-	-
Total	-275	-271	-	-3	-1	-

Royalty, license and commission income and expenses by division in 2009

EUR million	Total	Merck Serono	Consumer Health Care	Merck Millipore	Performance Materials	Corporate and Other
Royalty + license expenses	-172	-151	-1	-3	-17	-
Royalty + license income	345	328	2	7	8	-
Total	173	177	1	4	-9	-
Commission expenses	-257	-253	-	-3	-1	-
Commission income	24	23	-	1	-	-
Total	-233	-230	-	-2	-1	-

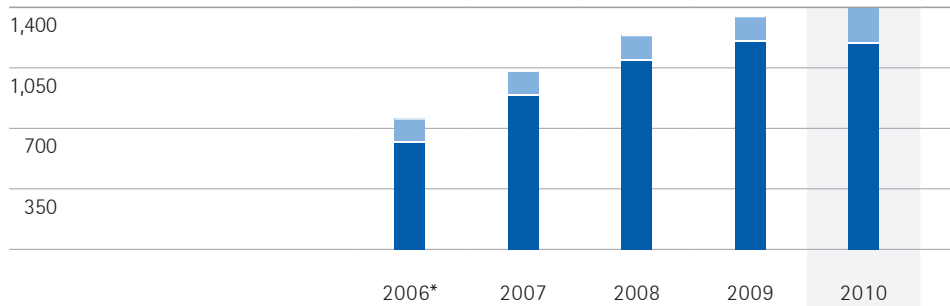
The marked 12% increase in administration expenses was due mainly to the first-time consolidation of the Millipore companies, as well as to currency effects. Excluding acquisition and currency effects, administration expenses rose by only 1.9%.

Showing a net expense of EUR 390 million, the line item "Other operating income and expenses" grew slightly (EUR -18 million) compared to the net expense reported in 2009. While the figure for 2009 included an increase of around EUR 80 million in expenses due to additions to provisions for litigation, the figure for 2010 includes transaction and integration costs for Millipore totaling EUR 87 million. Transaction costs accounted for around EUR 31 million, which were no longer capitalized as part of the purchase price due to changes in IFRS accounting rules but recognized immediately in the income statement. Additionally, higher impairment losses on intangible assets and property, plant and equipment lowered this item. In total, impairment losses amount to EUR 66 million. These are largely related to the termination of research

projects and research alliances, but also to altered market conditions, which lead us to expect lower sales than previously assumed. In 2010, we recorded EUR 25 million for exchange rate gains, whereas in 2009 we recognized exchange rate losses of EUR 7 million. Research and development costs increased by 3.9% to EUR 1,397 million. Thus, the ratio of R&D expenses to total revenues was 15% compared to 17% in 2009.

Research and development spending by business sector

EUR million



*including Generics

■ Chemicals ■ Pharmaceuticals

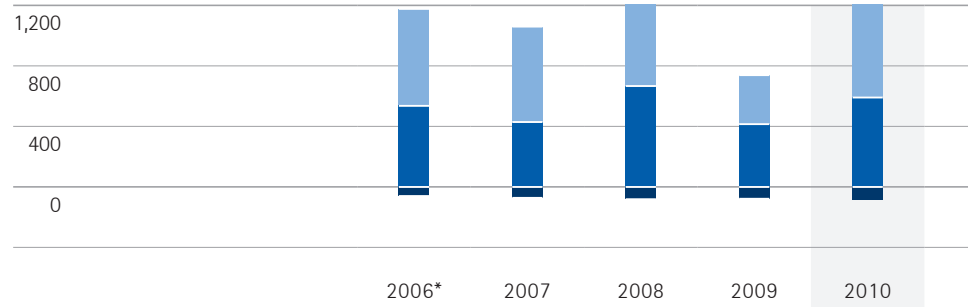
Amortization of intangible assets, which previously related mainly to the Serono purchase price allocation, now also include amortization of the intangible assets identified within the scope of the purchase price allocation for Millipore. These are mainly customer relationships and technologies as well as trademarks and brands, which are amortized over a period of 8 to 17 years. Consequently, depreciation and amortization rose significantly, totaling EUR 96 million for the Merck Millipore division. This item also includes expenses for amortization of intangible assets resulting from the previous Serono purchase price allocation. Due to a reassessment of the potential future sales for safinamide, we recorded an impairment of EUR 134 million to a residual value of EUR 63 million. This reassessment was based on the results of a Phase III study conducted by our development partner Newron. The results led to a reassessment of the market potential especially with regard to the achievable indications. In addition, the new valuation covers a delay in the project as well as an increase in R&D costs owing to increased regulatory requirements.

Group operating result
increases by 72%

Overall, the operating result of the Merck Group amounted to EUR 1,113 million, corresponding to an increase of 72% over 2009.

Operating result by business sector

in EUR million



*including Generics

■ Chemicals ■ Pharmaceuticals ■ Corporate and Other

Exceptional items: Gain on the divestment of Théramex as well as litigation costs

Exceptional items include the gain on the sale of Théramex amounting to EUR 69 million.

Further information on this can be found in the Notes under "Scope of consolidation".

In connection with the legal risk of our former subsidiary Dey Inc., USA, having allegedly reported false price information, a settlement was reached with the U.S. Department of Justice in 2010. The resulting expenses of EUR 67 million were recorded under exceptional items.

Although Dey Inc. was transferred to Mylan Inc., USA, within the scope of the divestment of the Generics business in 2007, Merck remains liable to Mylan for the costs of this litigation.

Additional expenses amounting to EUR 1 million relate to the sale of the Electronic Chemicals business in 2005 and include a purchase price reimbursement to the buyer for subsequent taxes. Moreover, this item includes transaction costs of EUR 1 million for the planned sale of the Crop BioScience business. The transaction, which is subject to antitrust clearance, is expected to close in 2011.

Profit after tax up 70%

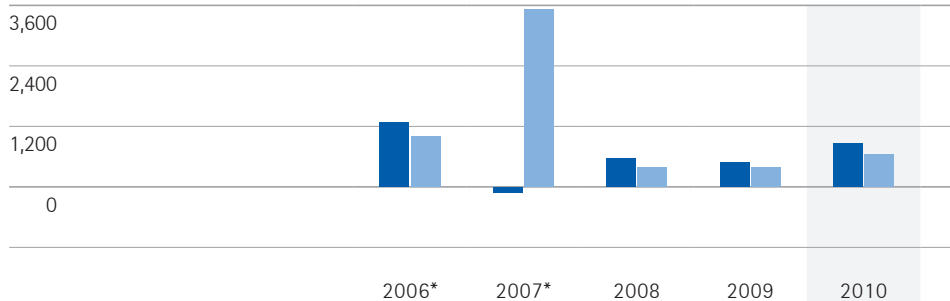
Sharp increase in profit after tax

The financial result showed an expense balance of EUR 252 million compared to EUR 134 million in 2009. The marked increase was due mainly to interest expenses for the financing of the Millipore acquisition.

Adjusted for exceptional items, the tax rate was 25.3%, compared to 21.6% in 2009. It should be noted that the capitalization of deferred tax assets on tax loss carryforwards had favorable one-time effects on the tax rate in 2009. Profit after tax amounted to EUR 642 million, which is 70% more than in 2009.

Profit before and after tax

EUR million



*including Generics

■ Profit before tax ■ Profit after tax

Dividend proposal

[Merck raises dividend to EUR 1.25](#)

We will propose to the Annual Meeting on April 8, 2011 a raise in the dividend from EUR 1.00 to EUR 1.25 per share.

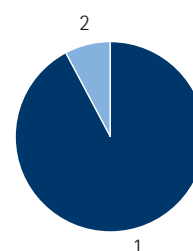
Good growth in the Pharmaceuticals business sector

The Pharmaceuticals business sector, comprising the two divisions Merck Serono and Consumer Health Care, increased total revenues by 7.1% to EUR 6,225 million in 2010. Total revenues increased by 7.6% in the Merck Serono division and by 1.1% in the Consumer Health Care division.

Pharmaceuticals | Total revenues by division

EUR million / % of total revenues

1	Merck Serono	5,754	92%
2	Consumer Health Care	472	8%



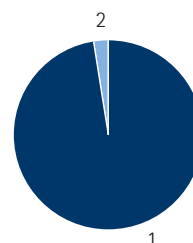
The Pharmaceuticals business sector increased its operating result as well. This figure rose by 44% to EUR 579 million. This was due exclusively to the development of the Merck Serono division (+59%). The operating result of the Consumer Health Care division was 71% lower than in 2009 (more information can be found on page 62).

The Pharmaceuticals business sector generated 67% of total revenues and 48% of the operating result of the Merck Group (excluding Corporate and Other). Return on sales increased from 6.9% to 9.3%.

Pharmaceuticals | Operating result by division

EUR million / % of operating result

1 Merck Serono	565	98%
2 Consumer Health Care	14	2%



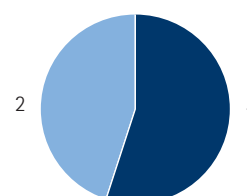
Chemicals business sector posts revenue growth of nearly 60%

The Chemicals business sector, comprising the two divisions Merck Millipore and Performance Materials, markedly increased total revenues by 58% to EUR 3,065 million. Both divisions performed very well, with total revenues increasing by 81% for Merck Millipore and by 38% for Performance Materials. However, for the Merck Millipore division, it should be noted that the Millipore companies have only been consolidated since July 2010 and were therefore only included in the financial statements for half a year. Organically, meaning adjusted for acquisition and currency effects, total revenues of the Chemicals business sector increased by 17%.

Chemicals | Total revenues by division

EUR million / % of total revenues

1 Merck Millipore	1,681	55%
2 Performance Materials	1,384	45%



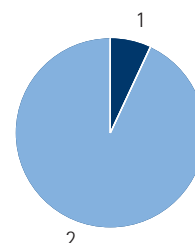
Liquid crystals and Pigments
post excellent results

The operating result of the Chemicals business sector increased by 92% to EUR 624 million, despite expenses such as the costs of the Millipore integration (EUR 87 million), the one-time inventory step-up within the scope of the Millipore purchase price allocation (EUR 86 million) as well as the amortization of intangible assets (EUR 96 million). Due to the aforementioned one-time expenses in 2010, the operating result of the Merck Millipore division declined by 59%. The significant rise of 166% in the operating result of the Performance Materials division was derived from the Liquid Crystals and Pigments business units.

Chemicals | Operating result by division

EUR million / % of operating result

1 Merck Millipore	44	7%
2 Performance Materials	580	93%



The Chemicals business sector generated 33% of total revenues and 52% of the operating result of the Merck Group (excluding Corporate and Other). Return on sales increased from 16.8% to 20.4%.

Growth by quarter

Total revenues by quarter

EUR million	1st quarter	2nd quarter	3rd quarter	4th quarter	2010	2009
Total	2,099	2,208	2,438	2,546	9,291	7,747
Pharmaceuticals	1,514	1,564	1,518	1,628	6,225	5,812
Chemicals	585	644	919	918	3,065	1,935
Corporate and Other	–	–	–	–	–	–

Components of growth in total revenues by quarter

in %	1st quarter	2nd quarter	3rd quarter	4th quarter	2010	2009
Organic growth	13.2	10.7	3.5	4.5	7.9	2.2
Pharmaceuticals	7.0	6.8	1.6	4.1	4.9	7.0
Chemicals	33.4	22.0	8.7	5.9	16.9	–9.5
Currency effects	–0.5	4.7	5.3	4.8	3.7	–0.2
Acquisitions/divestments	0.2	0.2	16.2	16.1	8.4	–
Total	12.9	15.6	25.0	25.5	19.9	2.1

Regions: Europe remains our top sales region

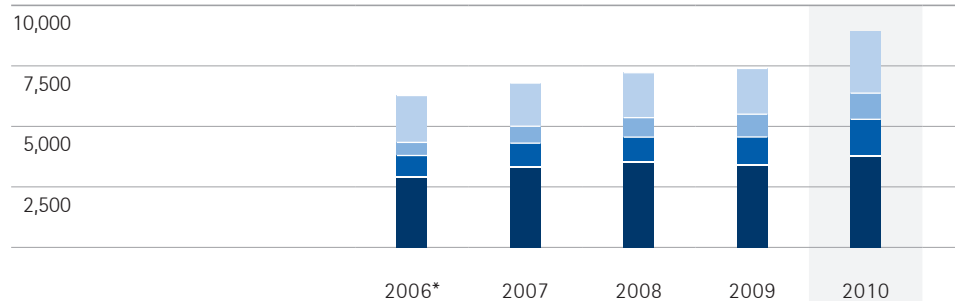
Sales by region showed the following breakdown: Accounting for 42% of sales, Europe remains our largest sales market, followed by Asia (26%), North America (17%) and Latin America (12%).

Sales growth of 10% in Germany

At EUR 3,747 million, sales in Europe increased by 11%. Within Europe, Germany is the top sales country, followed by France and Italy. Sales in Germany grew by 10% in 2010 to EUR 779 million. Within the Pharmaceuticals business sector, France is our largest European market, followed by Germany and Italy. Whereas pharmaceutical sales in Italy increased and stagnated in Germany, we registered a decline in France.

Merck Group | Sales by region

EUR million



*including Generics

■ Europe ■ North America ■ Latin America ■ Asia, Africa, Australasia

Focus on Asian markets

With sales of EUR 2,305 million, Asia is our second largest region and is increasingly gaining in importance, growing by 37% in 2010. In Asia, Taiwan is the leading country by sales for the Merck Group. Sales there increased by 75% to EUR 589 million following a weak 2009, mainly as a result of the Liquid Crystals business. The Chemicals business was responsible for 94% of sales in Taiwan, with the Liquid Crystals business accounting for the largest share.

Our second-largest market in Asia is Japan, where we posted a 57% increase in sales to EUR 486 million. The Pharmaceuticals business sector accounts for about 40% and the Chemicals business sector for around 60% of sales. The sales growth rates achieved by Pharmaceuticals and Chemicals varied, amounting to 39% and 71%, respectively.

South Korea is our third-largest Asian market. Sales increased here by 3.9% to EUR 360 million. The focus is on the Chemicals business, which accounted for 89% of sales.

Our declared growth market of China currently ranks fourth within Asia. We achieved a 26% increase in sales in this market to EUR 240 million. Sales in China are about evenly divided between our Pharmaceuticals and Chemicals business sectors. In India, which follows China in our sales ranking, we achieved sales growth of 38% to EUR 156 million. Pharmaceuticals accounted for 27% and Chemicals for 73% of sales.

Merck expanded sales in North America to EUR 1,530 million in 2010. This represents growth of 31%. At EUR 1,403 million (+31%), more than 90% of sales in this region are generated in the United States. The Pharmaceuticals business sector accounts for around 70% and the Chemicals business sector for around 30% of sales in the United States. This ratio will continue to shift in favor of Chemicals owing to the acquisition of Millipore in mid-2010.

In Latin America, Brazil is by far our largest market, followed by Mexico. Brazil is one of our declared growth markets besides India and China. In 2010, we increased our sales in Brazil by 37% to EUR 359 million. Around 80% of sales there were generated by the Pharmaceuticals business sector.

Acquisitions: Millipore strengthens the Chemicals business

On July 14, 2010, Merck successfully completed the acquisition of Millipore Corporation, a leading life science company based in Billerica, Massachusetts, USA. The Millipore companies

were then consolidated in the financial statements of the Merck Group for the first time. The total volume of the transaction was EUR 5,137 million. This includes payments amounting to EUR 4,612 million for the outstanding shares as well as existing options from stock option plans and payments of EUR 525 million to repurchase an outstanding convertible bond that had been issued by Millipore.

On February 28, 2010, Merck announced its offer to acquire all outstanding Millipore shares for USD 107 in cash per share of Millipore common stock. The closing followed the approval of the acquisition by Millipore's shareholders at a special meeting held on June 3, 2010, and the satisfaction of other customary conditions, including antitrust clearance in the United States and Europe. Millipore was delisted from the New York Stock Exchange on July 26, 2010. Likewise, an application for deregistration from the U.S. Securities and Exchange Commission (SEC) was filed on July 26, 2010. The deregistration took effect on October 13, 2010.

Millipore influences balance sheet ratios

Equity ratio of 46%

The total assets of the Merck Group amounted to EUR 22,388 million as of December 31, 2010.

This corresponds to an increase of EUR 5,675 million or 34% over December 31, 2009. The most significant impact on the balance sheet structure was the acquisition of Millipore and the financing thereof. To finance the acquisition, a bond consisting of several tranches with a total volume of EUR 3.2 billion was issued during 2010. The equity ratio declined from 56.9% at the beginning of 2010 to 46.3% on December 31, 2010. Apart from profit after tax amounting to EUR 642 million, positive currency effects from the development of foreign currencies versus the euro increased equity by around EUR 841 million.

Within the scope of the purchase price allocation for the Millipore acquisition, the acquired assets, liabilities and contingent liabilities have been recognized at fair values in the balance sheet. This primarily led to an increase in intangible assets by around EUR 5,264 million. This includes the goodwill from the transaction amounting to EUR 2,704 million. The fair value adjustments made within the scope of the purchase price allocation are to be considered as preliminary, with the exception of the measurement of inventories in the balance sheet as of the date of first-time consolidation. As a result of the acquisition, net debt increased to around EUR 4,484 million as of December 31. Primarily owing to the positive development of cash flow, net debt since the acquisition declined during the second half of 2010. Due to the higher debt level resulting from the Millipore acquisition, the two rating agencies Standard & Poor's and Moody's adjusted their ratings. Standard & Poor's issued a rating of BBB+ with a stable outlook on March 2, 2010 (previously: A-) and Moody's adjusted its rating on July 16, 2010, from A3 before the acquisition to Baa2 (stable outlook). In 2009, we started covering the pension provisions of Merck KGaA with financial assets on a long-term basis. This long-term approach will be expanded continuously. As of December 31, 2010, EUR 217 million was disclosed separately as a non-current financial asset.

As of December 31, 2010, the Crop BioScience business was disclosed as assets and liabilities held for sale pursuant to the announcement of the planned sale of this business to Novozymes A/S, Denmark. The Thérax Group was deconsolidated at the end of December. The agreed purchase price of around EUR 270 million was recognized as a receivable in 2010.

Underlying free cash flow
doubles

Underlying free cash flow reflects good business performance

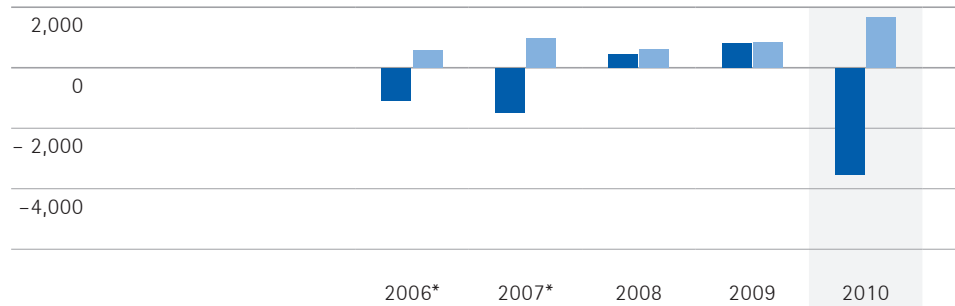
The free cash flow of the Merck Group in 2010 was also strongly affected by the acquisition of Millipore. It amounted to EUR –3,522 million compared to EUR 812 million in 2009. By contrast, adjusted for the effects of acquisitions and divestments, underlying free cash flow rose from EUR 852 million in 2009 to EUR 1,670 million, an increase of 96%.

Firstly, this increase is due to the strong improvement in the performance of the Chemicals business sector compared to 2009. This business sector's contribution to underlying free cash flow rose from EUR 432 million in 2009 to EUR 812 million in 2010, a rise equivalent to around 88%. Secondly, the Pharmaceuticals business sector accounted for 48% or EUR 1,353 million of underlying free cash flow, which was also mainly the result of good business performance. Underlying free cash flow for Corporate and Other, which also includes interest and tax payments, amounted to EUR –496 million, which was nearly consistent with 2009.

Cash flow was lowered by payments amounting to EUR 241 million in connection with our former subsidiary Dey Inc., USA, having allegedly reported false price information. EUR 215 million of these costs relate to the settlement with the U.S. Department of Justice. Although the company Dey Inc. was transferred to Mylan Inc., USA, within the scope of the divestment of the Generics business in 2007, Merck remains liable to Mylan for the costs of this litigation. The overall effect is reported in the segment Corporate and Other but was eliminated in the calculation of underlying free cash flow as adjustments for the divestment of the Generics business.

Free cash flow and underlying free cash flow

EUR million



*Including Generics

■ Free cash flow ■ Underlying free cash flow

Capital spending: Decline after years of increases

In 2010, Merck invested a total of EUR 396 million in property, plant and equipment. This was EUR 71 million or 15% less than in 2009. As in previous years, in 2010 we invested above-average amounts, for example to expand biopharmaceutical active ingredient production in Switzerland. As a result, the ratio of capital spending to total revenues was 4.3% in 2010 compared to 6.0% in 2009.

Europe accounts for more than three-quarters of capital spending

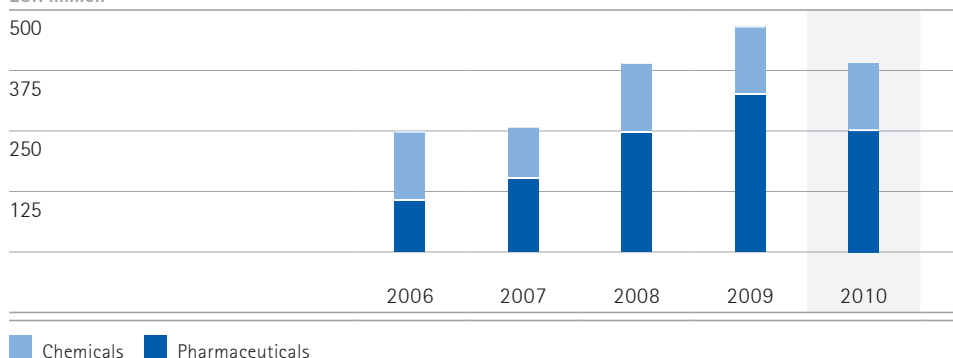
Individual investment projects, each with a value of more than EUR 1 million, accounted for more than two-thirds of capital spending. In regional terms, Europe accounted for around 77% of the total, with the focus on Germany and Switzerland. In Germany, Merck invested EUR 140 million in both new and expanded production capacities as well as in research and development facilities in Darmstadt and Gernsheim in particular, our two largest production sites. In Switzerland, capital spending totaled EUR 109 million, with the majority of this amount used to expand our biopharmaceutical production facilities.

In North America, we invested EUR 57 million – the majority of which went toward the expansion of pharmaceutical research in the Boston area. Capital spending in Latin America totaled EUR 13 million. Our subsidiaries in Asia accounted for a total capital spending volume of EUR 20 million, with the focus on Japan, Taiwan, China, India and South Korea, particularly for the Chemicals business sector.

Capital spending by the Pharmaceuticals business sector totaled EUR 255 million, with the Merck Serono division accounting for the majority of this amount. As in previous years, the main focus of the investments was on the expansion of our biotech production capacities in Corsier-sur-Vevey, Switzerland, which again in 2010 represented the single largest investment project of the Merck Group. Around 20% of capital spending in Pharmaceuticals related to headquarters in Darmstadt, Germany.

Capital spending on property, plant and equipment

EUR million



Capital spending on property, plant and equipment in the Chemicals business sector amounted to EUR 139 million, with the Merck Millipore division accounting for EUR 80 million and the Performance Materials division for EUR 59 million. Performance Materials invested chiefly at the Darmstadt and Gernsheim sites, our main locations, in order to expand and modernize existing production facilities, to improve infrastructure and to construct new research buildings. The focus of capital spending by the new Merck Millipore division was likewise in Darmstadt and Gernsheim. Around EUR 28 million of the division's total capital spending was attributable to the former Millipore companies, which have been consolidated since July 2010.

Key financial performance indicators of the Merck Group

Return on sales (ROS or the ratio of operating result to total revenues) and underlying free cash flow on revenues (FCR) are our two key financial performance indicators. The divisions use them to steer their business and we also use them for short- and long-term internally agreed targets. Group ROS increased from 8.4% in 2009 to 12.0% in 2010. This reflects the improvement in the overall business situation, which included a sharp increase in total revenues. FCR also developed positively in line with the good business development, increasing from 11% in 2009 to 18%. We refer to the average, or the arithmetic mean, of the two indicators ROS and FCR as the "Merck Business Target" (MBT). It is used for performance-based short- and long-term compensation systems and amounted to 15% compared to 9.7% in 2009. Both indicators, ROS and FCR, are presented by division in the Segment Reporting, on page 136. For EBITDA, as per the definition, depreciation and amortization of non-current assets are added back to earnings before interest and taxes (EBIT). For Merck, EBITDA is also an important financial indicator. Since the acquisition of Serono, amortization of intangible assets has been lowering the operating result. Owing to the Millipore acquisition, these amortization expenses increased further in 2010. When high impairment losses are also incurred, EBIT or the operating result alone does not reflect the actual earning power of the business. EBITDA increased by nearly 50% from EUR 1,625 million in 2009 to EUR 2,457 million in 2010.

Strong improvement in EBITDA

Value added

Value added is a measure of the economic strength of a company and indicates how the corporate result is achieved and for what it is used.

Our corporate result, meaning the sum of total revenues, other income and financial income, amounted to EUR 9,552 million in 2010. After deducting the costs of materials as well as other purchased services and expenses, gross value added amounted to EUR 5,008 million.

Following the deduction of depreciation and amortization, net value added was EUR 3,750 million.

With a share of 69%, the majority amounting to EUR 2,597 million benefited employees in the form of personnel expenses. Financial expenses increased over 2009 to EUR 291 million owing to higher financing costs for the acquisition of Millipore. Taxes on income increased significantly to EUR 220 million due to the higher level of profit before tax. At EUR 642 million, profit after tax considerably exceeded the 2009 figure of EUR 377 million.

Net value added statement		
EUR million	2010	2009
Total revenues	9,291	7,747
Other income	221	135
Financial income	40	36
Corporate result	9,552	7,918
Cost of materials	-1,246	-1,052
Other purchased services/expenses	-3,298	-3,075
Gross value added	5,008	3,791
Depreciation and amortization	-1,258	-1,004
Net value added	3,750	2,787

Distribution of net value added		
EUR million	2010	2009
Personnel expenses	2,597	2,129
Financial expenses	291	171
Taxes on income	220	110
Profit after tax	642	377
Net value added	3,750	2,787

Summary assessment

In 2010, the business performance of Merck was very successful overall. As of the beginning of 2010, we recorded higher total revenues compared to year-earlier quarters. Primarily the Chemicals business sector benefited from improved economic conditions. Additionally, the acquisition of Millipore contributed to the increase in total revenues. The operating result of the Chemicals business sector increased markedly despite the costs of the integration of Millipore and the expenses from the purchase price allocation. In the Pharmaceuticals business sector, the operating result was lowered by one-time expenses from declines in the value of intangible assets.

The balance sheet ratios and the key financial indicators of Merck in 2010 were influenced mainly by the acquisition of Millipore. On the assets side of the balance sheet, acquired intangible assets led to an increase of more than EUR 5 billion. This compares mainly with third-party financing of the Millipore acquisition in addition to deferred taxes resulting from the purchase price allocation. Thanks to the good development of cash flow, Group net financial debt has already fallen since the acquisition.

CORPORATE RESPONSIBILITY

We live up to our responsibility for our employees, our products and the environment. We also live up to our responsibility for society. That is because not only ownership, but also business success creates responsibility.

Responsibility is one of the basic principles of company management

Firmly establishing and managing responsible behavior throughout the company is one of the basic principles of company management at Merck. As the top executive body of the company, the Executive Board examines overarching corporate responsibility issues at least twice a year. During 2010, these included such issues as greenhouse gas emissions, access to medicines, supply-chain monitoring, and Merck's special responsibility as a research-based company. The latter resulted in, among other things, the adoption of policies on stem cell research and on the use of nanotechnology. In November 2010, Merck signed the "Code of Responsible Conduct for Business", an initiative by German companies aimed at firmly establishing measurable standards with respect to fair competition, social partnership, merit, and sustainability. Merck is a member of the FTSE4Good Index, a leading international stock index for socially responsible investing. Environmental protection as well as adherence to and support of human rights are examples of the inclusion criteria.

As part of a materiality analysis, we identified and prioritized those sustainability topics of greatest importance to Merck. The results of the analysis influence the selection of corporate responsibility (CR) activities and key issues described on the following pages as well as in the extensive Corporate Responsibility Report, which is published every two years and posted on our website. The analysis took into account the perspectives of different stakeholder groups, including for instance employees, business associates, site neighbors, and investors.

EMPLOYEES

As of December 31, 2010, our company had 40,562 employees, which was 7,500 more than in 2009. Merck was represented in 67 countries by 236 companies and had 70 production sites located in 26 countries.

The change in the number of employees was mainly a result of our acquisition of the life science company Millipore, which we completed in July 2010. The following countries saw significant increases in the workforce in connection with this acquisition: In the United States 2,712 employees came from Millipore to Merck, in France 1,323, in Ireland 484, in India 272, in Japan 204, in China 188, in The Netherlands 153, and in Brazil 105.

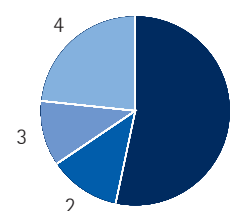
In Germany, Merck had 10,340 employees, which was 436 more than in 2009. Here, the increase was attributable to research and development in the Merck Serono division, to chemical production, to the establishment of a global purchasing organization, and to the addition of

Millipore employees in Germany. Merck Serono in China had 1,230 employees, 333 more than in 2009, as the division opened a new research center there and also expanded its sales and marketing activities.

A total of 512 young people were enrolled in vocational training programs in 19 different occupations at the Darmstadt site, the largest of the Merck Group.

Number of employees as of December 31, 2010

1 Europe	21,679	53%
2 North America	4,909	12%
3 Latin America	4,546	11%
4 Asia, Africa, Australasia	9,428	23%



Integration of Millipore employees

The acquisition of Millipore gives Merck the possibility to strengthen its position in the attractive life science market and at the same time to expand its geographic reach. Therefore, the expertise and skill of the Millipore employees as well as their commitment are key to the success of this business. Right from the start of the integration process, we made sure when appointing people to positions that the management teams of the new Merck Millipore division could optimally draw on the expertise of both companies. Further key features of the integration process included regular, open communication, change management activities that take specific corporate cultures into account, and concepts designed to maintain employee loyalty.

CORE TOPICS OF OUR INTERNATIONAL HUMAN RESOURCES WORK

Attracting and retaining talented people in the long term

As an integrated global company, Merck has implemented uniform human resources programs worldwide. These include, for example, the Performance Management Process and the Global Rewards Policy, which aim to develop a performance culture based on the joint strategic direction of the company and a performance-related, market-oriented compensation structure. The Talent & Succession Management Process helps us to fill positions with the right people, as well as attract and retain talented employees. In autumn 2010, we adopted a global employer branding concept, the motto of which is "Make great things happen." The aim here is to present to potential applicants those features that make Merck unique. These include an inspiring and motivating work environment in which innovations thrive, the possibility to contribute ideas to benefit customers and the company, and personal development.

Individual development plans
have high priority

Performance management

Performance management is of crucial importance for promoting entrepreneurial success and for identifying and developing employee potential. Key features of this process are clear objectives, differentiated feedback in performance management, transparent performance assessment, and the preparation of individual development plans. In 2009, Merck started the stepwise implementation of the globally uniform Performance Management Process, in which around 7,100 employees are currently participating. Additional employee groups will be phased into the process, particularly also the employees who have joined Merck from Millipore. A total of around 21,000 employees are to participate in the Performance Management Process by the end of 2011.

Global rewards policy

The compensation structure guidelines describe the principles governing how employees are remunerated depending on their performance and capabilities, and on the situation in the respective labor market. The Global Rewards Policy applies to all Merck companies worldwide and ensures a systematic compensation structure.

Career opportunities

Merck wants to offer its talented employees the opportunity to have an interesting career and to continually develop themselves within the company both personally and professionally. The Talent & Succession Management Process and the Expert Talent Process are two systematic programs that Merck uses to identify and specifically promote employees who show potential for a management position or an expert career path. These programs enable Merck to appoint the right people to management positions and at the same time to retain talented employees. In 2010, 76% of promotions to management positions were filled by internal candidates.

Employee engagement survey

Motivated and committed employees are our most valuable asset. Merck wants to offer its employees adequate scope for them to make their best individual contribution to the success of the company. In order to create the right conditions for this, Merck regularly conducts a Group-wide employee survey in which employees are able to express their assessment of Merck as an employer, their motivation and identification with the company, as well as their needs. The results are incorporated into measures that we use to continuously improve the framework conditions. Altogether 84% of employees participated in the most recent survey, which was conducted at the beginning of 2010 in 28 languages. The overall results show that the majority of employees identify strongly with Merck and engage themselves for the success of the company. All 11 categories saw improvements over the previous year's survey. In seven categories, Merck outperformed the global high-performing companies benchmark. This comprises a group of companies across a range of sectors that are considered to be particularly strong performers due to their excellent financial results as well as high employee engagement scores.

Further improvement in occupational safety

In terms of accident prevention and occupational safety, we again made significant progress in lowering the most important indicator, the lost time injury rate (LTIR). This internationally used key figure describes the number of workday accidents resulting in lost time per one million working hours. Merck has set itself the goal of reducing the LTIR to 2.5 by 2015. In order to achieve this, we have introduced, for example, the "Safety Behavior Change" program to enhance the safety awareness of each individual employee. We are also increasing our training measures for persons responsible for EHS (Environment, Health, Safety), promoting independent responsibility of our employees, and supporting a wide variety of local occupational safety programs. Despite our efforts to prevent accidents, one accident with a fatal outcome occurred in 2010. A member of the sales force in Colombia died from the injuries she suffered during a car accident.

Accidents					
	2006	2007	2008	2009	2010
LTIR (Lost Time Injury Rate)	6.9	4.7	3.9	3.4	3.0
Number of fatalities	0	3	1	0	1

Not portfolio-adjusted; 2010 including Merck Millipore

DIVERSITY IN THE WORKFORCE

As an international company, Merck endeavors to achieve a good balance between different cultures and nationalities, between different age groups, and between male and female employees. Merck is convinced that workforce diversity promotes team performance, contributing to the company's entrepreneurial success. We have therefore implemented measures to sustainably anchor this diversity. Yet we realize that we need to further develop these measures.

Ratio of men and women

Women currently make up 43% of the workforce. The ratio of female to male employees varies among individual business areas, functions and regions. In the Pharmaceuticals business sector, 47% of all employees are female, in Chemicals 33%, and in Group functions 21%. In North America, 47% of all employees are female, in Europe 46%, in Latin America 43%, and in Asia 33%. Women make up 55% of the workforce in research and development, which is the highest percentage, followed by 50% in administration. The lowest percentages of women are in production (32%) and the infrastructure departments (28%). Merck has set itself the goal of increasing the percentage of female employees wherever they are underrepresented.

Merck is a highly international company

Internationality

74% of all employees come from countries other than Germany. In 2008, the first year in which we compiled these figures, this was 70%. The increase is primarily due to business expansion in the United States, India and China. One of our basic principles is to hire and develop employees from the respective countries. The company's decision to locate the divisional headquarters of Merck Serono in Geneva (Switzerland) and of Merck Millipore in Billerica, Massachusetts (USA) also contributes to the internationality of the workforce, which we want to further intensify.

Approaches for coping with demographic change

Age structure

Demographic change, and the aging of the population, is not equally noticeable in all countries in which we operate. However, we must adapt to it, particularly in Germany, some other EU countries, and the United States. In these countries, the average age of our employees already exceeds 40 – and we assume that this figure will increase further. In Europe, we are addressing these demographic challenges in various programs. These include adapting workplaces to the needs of older employees and establishing a health management program to maintain their ability to do their job.

Management positions

A balanced diversity among the executive staff enhances career advancement opportunities for talented employees. However, it also enables the company to leverage a broad base of experience and allows for more differentiated entrepreneurial decision-making.

The percentage of women in management positions, meaning grade 14 and higher according to the global grading system introduced at Merck two years ago, is currently 22% calculated across the entire company (excluding employees who joined Merck as a result of the Millipore acquisition since the global grading system has not yet been implemented for them). The percentage is higher at the subsidiaries than at corporate headquarters in Darmstadt; it is also higher in the Pharmaceuticals business sector than in Chemicals. The ratio of women in management positions is lower in certain Group functions, such as IT for example. Merck wants to further increase the percentage of women in management positions. Besides the local measures that are already in place – such as the cross-company mentoring program and creating opportunities to help employees reconcile the demands of career and family – we intend to develop further programs during 2011. We set ourselves a global objective of increasing the percentage of women in top management positions to 25% to 30% by 2016. This target may be supplemented by local or unit-specific values. At the same time we have created the function of Chief Diversity Officer to support implementation.

57% of all management positions are held by persons of non-German nationality – altogether 55 different nationalities are represented in such positions. The internationality of our management levels reflects the global nature of our business activities.

RESPONSIBILITY FOR PRODUCTS AND THE ENVIRONMENT

Materiality analysis identifies sustainability topics

By conducting a materiality analysis, we identified sustainability issues that are of importance to our Chemicals and Pharmaceuticals businesses. In both business sectors, responsibility for products is at the heart of our corporate responsibility. Group-wide topics include supply-chain sustainability and the use of nanotechnology. Examples of specific topics in Pharmaceuticals are transparency in research, bioethics, animal testing, and access to medicines. Apart from developing safe and effective medicines, our aim is to ensure access to medicines among the people who need them, for example through a range of initiatives and donation programs in developing and emerging countries as well as research projects. The most important issues in Chemicals include product safety, product risk management and resource efficiency.

REACH and GHS: Turning challenges into opportunities

We are committed to ensuring that no risk arises from our products if used properly. When developing new products, we take the sustainability aspects of their entire life cycle into account. Extensive documentation of product properties and compliance with all legal requirements have high priority for us.

REACH: Understanding requirements as opportunities

We made further excellent progress with the stepwise implementation of the EU regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), which involves high regulatory challenges. In line with our motto "Turning Challenges into Opportunities", we also offer our customers added value through our professional expertise.

Roughly, REACH is divided into three phases: Depending on the amount produced, a substance must be registered by 2010, 2013, or 2018. Merck registered around 100 substances by the end of the first deadline on December 1, 2010. Apart from the required substances, we also registered several with a later deadline.

Requirements efficiently implemented in operating business

Besides meeting legal requirements, Merck takes on a leading role in regulatory issues

The Globally Harmonised System of Classification and Labelling of Chemicals (GHS) has led to the European CLP regulation (Classification, Labelling and Packaging of Substances and Mixtures), which we implemented very rapidly. In February 2009, customers received the first CLP-conform deliveries. In September 2010, we were already in a position to include in the new Chemicals catalog all CLP information for all substances and numerous mixtures.

In addition to the reclassification and relabeling of chemicals, the EU has also recently redefined the format and content of the relevant safety data sheets. In time for the December 1 deadline, we provided the required new safety data sheets for all substances in the official EU languages. We thus succeeded in interpreting the new requirements with legal certainty and implementing them very efficiently in our operating business.

In addition to meeting our legal requirements, we provided extensive information material (brochures, posters, e-learning courses) on the Web and held seminars to train customers. This also strengthens Merck's leading role in regulatory matters, reflecting our customer-centric perspective and thus also the Merck brand.

"Design for Sustainability"

The Merck Millipore division offers an example of sustainable product development with its "Design for Sustainability" principle. This starts with production and packaging, extends to helping customers to conserve resources in the daily use of products, such as laboratory instruments, and includes their disposal or recycling possibilities. Examples are the Mobius® filter units and bioreactors for biopharmaceutical production.

Strategic alliance with GIZ in Southeast Asia

For Merck, product responsibility does not end with the sale of the product. The return and eco-friendly disposal of chemicals and packaging waste is part of our corporate responsibility. Together with the German Society for International Cooperation (Deutsche Gesellschaft für internationale Zusammenarbeit – GIZ), Merck is promoting better chemicals management in Thailand, Indonesia and the Philippines, with the aim of improving eco-awareness and the handling of chemicals in these countries. This project is based on the Retrologistik® concept, which involves the regulated return and safe disposal of packaging waste such as empty chemical bottles. The alliance with the GIZ started in 2010 and is initially planned for three years.

Nanotechnology: Corporate guidelines

We are addressing not only the opportunities, but also the risks of nanotechnology. We follow the precautionary principle and take safety issues involving nanomaterials seriously. When manufacturing and processing products, we strictly observe all statutory regulations and other applicable standards. These include the guidelines of the German Federal Institute for Occupational Safety and Health (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin) as well as the German Chemical Industry Association (Verband der Chemischen Industrie). We expanded our guidelines on handling nanomaterials, which apply throughout the Group, to include those aspects of relevance to the Pharmaceuticals business.

ISO 14001: Group certificate confirmed

All Merck products come
from certified sites

In 2009, Merck had the environmental management system of all its production sites certified in accordance with the international ISO 14001 standard. This globally valid group certificate was confirmed by the annual certification maintenance audit in 2010. Consequently, all products manufactured by Merck come from certified sites.

Environmental protection spending

Our spending on environmental protection, health and safety totaled EUR 140 million in 2010. This figure includes depreciation of property, plant and equipment, and operating costs.

Achieving a 20% reduction in greenhouse gas emissions by 2020

Our goal remains to reduce all our greenhouse gas emissions – both direct and indirect – by 20% by 2020, compared to the 2006 levels. Direct emissions are those emissions that a company itself releases by burning fossil fuels for steam or power generation, or through production processes. Indirect emissions are those that are generated from purchased energy, such as electricity, steam or distance heating.

Energy

	2006	2007	2008	2009	2010
Energy consumption (in GWh)	1489	1492	1480	1352	1474
Purchased energy					
Natural gas (in million m ³)	77.9	75.8	79.0	72.7	78.2
Light heating oil (in kilotons)	7.8	9.5	8.8	6.7	8.6
Heavy heating oil (in kilotons)	0.7	0.9	0.6	0.2	0.3
Electricity (in GWh)	533	536	513	472	511

Portfolio-adjusted in accordance with the Greenhouse Gas Protocol; 2006–2010 including Merck Millipore

CO₂eq emissions (eq=equivalents)

Emissions in kilotons	2006	2007	2008	2009	2010
Direct CO ₂ eq emissions	321	374	307	304	352
Indirect CO ₂ eq emissions	232	237	221	201	222
Total CO ₂ eq emissions	553	611	528	505	574

Portfolio-adjusted in accordance with the Greenhouse Gas Protocol; 2006–2010 including Merck Millipore

New climate protection program

EDISON is the name of a new climate protection program that Merck launched in 2009. It systematically pools all Merck Group activities worldwide that are aimed at climate protection and energy efficiency. The objective is to reduce energy consumption, thus cutting costs, conserving resources and protecting the environment. Here we are focusing on the largest producers of greenhouse gas emissions: In recent years, 15 sites were responsible for around 80% of the Merck Group's total emissions. At Darmstadt and Gernsheim, two of the sites that produce the most emissions, activities are already in progress. Specially trained experts in energy, building and air conditioning technology as well as electrical engineering are systematically analyzing the biggest consumers and recommending specific measures to save energy.

Energy conservation audits
launched globally

Yet this project concerns not only the German sites. Energy consumption and greenhouse gas emissions are being closely examined at our sites around the world. For example, energy conservation audits were already conducted at the Onahama and Atsugi sites in Japan. At our site in Norwood, Ohio (USA), entirely new heating boilers and process refrigeration units were installed. By significantly improving its climate balance, the site is thus capable of contributing to the Merck Group's overall climate objectives. The Merck Serono site in Bari, Italy, which is one of the Merck Group's 15 largest producers of greenhouse emissions, received certification in accordance with the energy management standard EN 16001. Bari is the first pharmaceutical production site in Italy to have received this certification.

Utilizing solar energy

Photovoltaic installations are used to generate energy at multiple locations throughout the Merck Group. The Merck Millipore division took on a pioneering role with its sites in Billerica and Bedford, Massachusetts (USA) and Molsheim (France), where solar energy partly covers energy requirements. Solar energy systems are scheduled to start operating at our Merck Serono sites near Tel Aviv, Israel and Rome, Italy in 2011.

Apart from greenhouse gas emissions, the Merck Group also records other air emissions. Group-wide emissions of these substances at Merck are relatively low.

Air emissions

Emissions in kilotons	2006	2007	2008	2009	2010
VOC (volatile organic compounds)	1.8	1.9	1.9	0.2	0.2
Nitric oxides	0.3	0.2	0.2	0.1	0.1
Sulfur dioxide	0.07	0.03	0.05	0.03	0.03
Dust	0.02	0.02	0.02	0.02	0.02

Not portfolio-adjusted; 2010 including Merck Millipore

RESPONSIBILITY FOR SOCIETY

Our social commitment is divided into local charitable projects that the Merck subsidiaries implement independently, and into global projects. The latter include the Merck Praziquantel Donation Program, the Global Pharma Health Fund (GPHF), and the Merck Philharmonic Orchestra.

Praziquantel Donation Program: Combating schistosomiasis

In 2007, we entered into a partnership with the World Health Organization (WHO) to combat the worm disease schistosomiasis in African school children. Merck is donating 200 million tablets of Cesol® 600 containing the active ingredient praziquantel over a ten-year period. This donation will permit the treatment of 27 million children. Schistosomiasis is the most common tropical disease in Africa after malaria, causing primarily children to suffer. In 2010, 3.8 million children were treated within the scope of this partnership.

Global Pharma Health Fund: Protection from counterfeit medicines

Combating
counterfeit medicines

The Global Pharma Health Fund (GPHF), which is funded by Merck, is combating counterfeit medicines in developing and emerging countries. According to WHO estimates, up to 30% of the medicines offered worldwide are either counterfeit or of inferior quality. Many African and Asian countries are especially affected by this since they lack effective regulatory and enforcement systems for medicines. In order to effectively identify counterfeits and quickly remove them from circulation, 394 compact mobile laboratories, or GPHF-Minilabs, were in use in more than 70 countries as of December 31, 2010. They make it possible to rapidly identify pharmaceutical active ingredients and to immediately detect inferior or ineffective drugs.

Merck Philharmonic Orchestra: Cultural promotion

The Merck Philharmonic Orchestra is one example of how we promote culture. With around 80 professional musicians and a very diverse concert repertoire, the orchestra is not only an integral part of the cultural life in the vicinity of our corporate headquarters in Darmstadt; it also tours internationally. Special events for children and adolescents as well as cooperation with schools are intended to encourage young people to develop a taste for classical music.

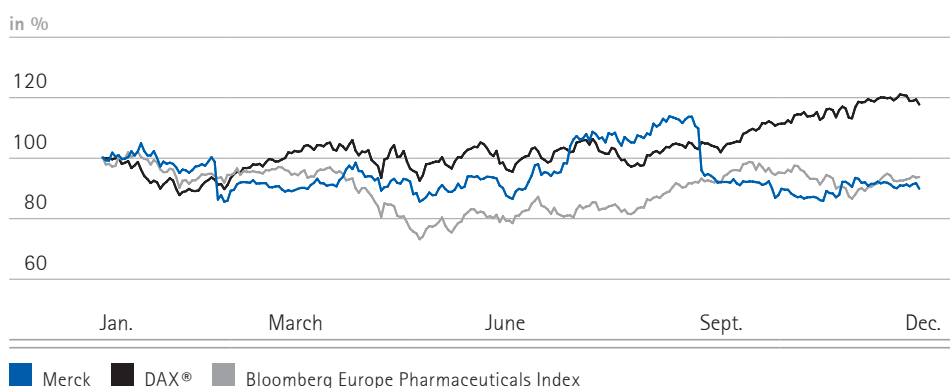
MERCK IN THE CAPITAL MARKET

The Merck share price showed strong fluctuations. EUR 3.2 billion euro bond successfully issued.

Stock market recovery continues

The recovery that began in the first half of 2009 in the international stock markets continued in 2010. This was attributable to several factors, including the further recovery of the global economy, persistently low interest rates set by the leading international central banks, as well as expansionist monetary policies, especially in the United States. However, the after-effects of the global banking crisis that escalated in 2008 had a significant impact on the budgets of a number of eurozone members. Government bond yield spreads increased sharply, prompting the European Central Bank to issue an unprecedented level of guarantees. This also had an impact on the euro, the value of which declined significantly against all international reserve currencies for a time. By contrast, the market for corporate bonds proved to be much more stable, benefiting from high demand despite comparatively low coupons.

The performance of Merck shares vs. the DAX® and Bloomberg Europe Pharmaceuticals Index in 2010



Development of the key indices

With the DAX®, Germany's blue-chip index of the 30 largest German stock corporations by free float market capitalization and trading volume, climbing to well over 6,000 points, the German stock market got off to a strong start in 2010. Growing concerns about the credit ratings and liquidity of a number of EU member states – especially Greece and Ireland – damped market sentiment several times throughout the year, in some cases severely. However, the intervention by European monetary authorities repeatedly proved capable of reassuring market participants. The DAX® hit an annual low of 5,434 points on February 5, reached its high of 7,078 points on December 21, and finished the year on December 31 at 6,914 points, a 16% increase for the full year. The development of the BEUPHRM Index (Bloomberg Europe Pharmaceuticals Index), which comprises 22 selected European pharmaceutical companies, was quite different. The

At year-end, the DAX® was just below 7,000 points

annual high of 103.44 points was achieved on January 19, while the low for the year of 81.59 points was reached on May 25. This was primarily attributable to the declines in the share prices of index heavyweights such as AstraZeneca, GlaxoSmithKline, Novartis, and Sanofi-Aventis, which together account for far more than half of the index's weighting. By October 15, the BEUPHRM had nearly recovered from these losses, closing at 100.98 points. However, with a decline of 3.4% as of year-end (December 31: 97.13 points), it remained well behind the development of the DAX®.

Uneven performance of Merck shares

Merck shares could not benefit from the sentiment in the German stock market, which progressively improved in the course of 2010. During the year, the Merck share price moved dynamically in a range between EUR 57 and EUR 73. However, compared to the price at the beginning of the year (EUR 65.21), Merck shares finished the year 8.2% lower, closing at EUR 59.85. The development of the share price was largely independent of the developments on the German stock market.

Negative CHMP opinion
on cladribine tablets
lowers the share price

The market reacted with disappointment to the company's initial outlook for 2010, which was cautious due to the difficulties encountered in 2009, as well as to the proposal to lower the dividend from EUR 1.50 to EUR 1.00. As a result of this announcement, which was made on February 23, with the publication of the annual results, Merck shares dropped by more than 10%, reaching their annual low of EUR 57.62 two days later. With the announcement of the acquisition of Millipore, the Merck share price rose by 2.9% on March 1. The share price did not exceed EUR 67 until the guidance was significantly raised on July 29 with the publication of the results of the second quarter. A high of EUR 72.28 was achieved on September 10. Just three days later, the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) surprised physicians and shareholders with its negative opinion regarding the marketing authorization application for cladribine tablets as a treatment for multiple sclerosis. As a consequence, Merck shares lost slightly more than 10% of their value on September 24. The subsequent selling pressure led to a decline in the share price to EUR 57.75 on November 17. Merck shares recovered slightly as of this date thanks to the news concerning FDA regulatory review of Egrifta™ (tesamorelin), increasing to EUR 59.85 by year-end.

Share data ¹

	2010	2009
Earnings per share after tax and non-controlling interest in EUR	2.91	1.68
Dividend in EUR	1.25	1.00
Share price high in EUR (Sept. 10, 2010/July 1, 2009)	72.28	74.37
Share price low in EUR (Feb. 25, 2010/March 6, 2009)	57.62	57.24
Year-end share price in EUR	59.85	65.16
Actual number of shares in millions (as of year-end)	64.6	64.6
Theoretical total number ² of shares in millions (as of year-end)	217.4	217.4
Market capitalization ³ in EUR million (as of year-end)	13,011	14,165

¹ Share-price relevant 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. As the share capital of EUR 168.0 million as of December 31, 2010 was divided into 64.6 million shares, the corresponding calculation for the general partner's capital of EUR 397.2 million resulted in 152.8 million theoretical shares.

³ Based on the theoretical number of shares on December 31, 2010.

Nearly 600,000 shares traded daily

In 2010, an average of about 574,000 Merck shares were traded daily on the trading platforms of Deutsche Börse. On February 23, the date on which we published the annual results for 2009 and the outlook for 2010, 4.4 million Merck shares changed hands, making this the record-high trading day for 2010. Generally, the tradability of shares, expressed as the liquidity or the trading volume, is an important indicator that influences not only the buying behavior of investors, but also serves, in addition to the free-float market capitalization, as a key criterion in the composition of share indices. Based on a free-float market capitalization of EUR 3,868 million, Merck shares ranked 32nd among the largest German DAX companies at the end of the year. Based on a trading volume of EUR 9,226 million over the past 12 months, Merck shares took 28th place.

Increasing proportion of investors based in Germany

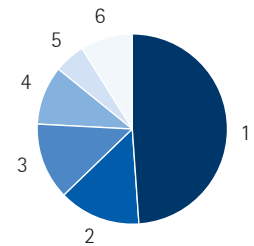
Increasing popularity among
German investors

From the shareholder identification survey conducted in October 2010, we identified around 76% of the bearer shares in free float held by institutional investors. The survey provides information about the regional distribution of the institutional investors as well as the classification of the respective institutional investor types. As in the previous years, U.S. institutional investors hold the largest proportion of Merck shares in free float. However, the proportion of U.S.-based shareholders declined from 53% in 2009 to 49% in 2010. By contrast, German institutional investors built up significant stakes and now hold 12% of the share capital as compared with 9% in 2009. The United States still ranks well ahead of both the United Kingdom, where 13% of our shares are held, and Germany. The distribution of investors by investment strategy shows a slight increase in the proportion of value- and growth-oriented investors. The proportion of index-oriented investors rose by seven percentage points to 19%.

Identified investors by region

in %

1	United States	49%
2	United Kingdom	13%
3	Germany	12%
4	Rest of Europe	9%
5	France	5%
6	Rest of World	8%

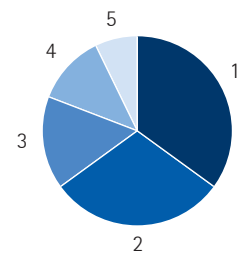


Source: Thomson Reuters (Status September 2010)

Identified investors by type

in %

1	Value	36%
2	Growth	32%
3	Index	19%
4	GARP (growth at reasonable price)	9%
5	Other	4%



Source: Shareholder survey (Status October 2010)

As of December 31, 2010, the following shareholders reported their holdings in Merck shares to the company in accordance with the German Securities Trading Act:

- 5% – 10% Barclays PLC, London (United Kingdom)
- 5% – 10% BlackRock Inc., New York (USA)
- 5% – 10% Capital Research and Management Company, Los Angeles (USA)
- 5% – 10% Sun Life Financial Inc., Toronto (Canada)
- 5% – 10% Templeton Global Advisors Ltd., Nassau (Bahamas)
- 3% – 5% Capital World Growth and Income Fund, Inc., Los Angeles (USA)
- 3% – 5% Deutsche Bank, Frankfurt (Germany)
- 3% – 5% Fidelity International Ltd., Hamilton (Bermuda)

Nearly 60% of the share capital represented at the Annual General Meeting

At the Annual General Meeting on April 9 in Frankfurt, 37,624,121 out of 64,621,126 outstanding shares were represented. This corresponds to 58.22% of the share capital. With the exception of agenda items 4 and 5, which concerned resolutions on the approval of the actions of the members of the Executive Board and the Supervisory Board and were each passed with 56% of the votes, more than 99% of the votes were in favor of the other five agenda items. Further details can be found on our website at www.merck.de.

Numerous Investor Relations activities

In the course of 2010, the Executive Board and the Investor Relations team took part in 13 investor conferences in Frankfurt, London, Los Angeles, Munich, New York, Paris and San Francisco. In addition, company representatives visited investors at the key financial centers in the United States and Europe within the scope of 23 roadshows. International investor groups visited Darmstadt on three dates and equity sales briefings were held with the sales staffs of selected banks on three further dates. A large number of face-to-face meetings were held. For the first time since 2007, we held investor and analyst conferences in London and New York in September. The Executive Board gave detailed presentations of the business and financial strategy of Merck.

Analysts' assessments of Merck

Analysts
positive toward Merck

In 2010, 40 banks and equity analysts reported regularly on and assessed Merck shares. As of the end of 2010, the fair target price for Merck shares as gauged by the analyst community was EUR 67.44. A total of 16 analysts gave our shares a buy recommendation, 17 a hold recommendation and six a sell recommendation. Further details can be found on our website at www.merck.de/investors.

FTSE4Good Index

Sustainability is the entrepreneurial compass that has guided Merck well for centuries. We understand sustainability as ethical actions taken in line with the economic, ecological and social interests of all Merck stakeholders, such as our customers, suppliers, employees and owners. Our efforts in these areas are continually analyzed and assessed by independent capital market institutes. Since 2008, Merck shares have been in the FTSE4Good Index, which comprises companies with highly sustainable business practices. Additionally, Merck shares are included in the DAX® Global Sarasin Sustainability Germany Index.

Capital and shares

As of the balance sheet date, the company's subscribed capital is divided into 64,621,125 no-par value bearer shares plus one registered share. The holder of the registered share is E. Merck Beteiligungen KG. It is entitled and obliged to appoint one-third of the members of the Supervisory Board representing the limited liability shareholders. If the holder of the registered share is a general partner, he or she has no such right of appointment. The transfer of the registered share requires the company's approval. The approval is granted at the sole discretion of the personally liable general partner with an equity interest, namely E. Merck KG.

According to the Articles of Association of the company, the general partners not holding an equity interest who form the Executive Board are appointed by E. Merck KG with the consent of a simple majority of the other general partners. A person may only be a general partner not holding an equity interest if he or she is also a general partner of E. Merck KG. In addition, at the proposal of E. Merck KG and with the approval of all general partners not holding an equity interest, further persons may be appointed to the Executive Board who are not general partners not holding an equity interest.

The Articles of Association of the company can be amended by a resolution of the Annual General Meeting that requires the approval of the general partners. The resolutions of the Annual General Meeting are, notwithstanding any statutory provisions to the contrary, adopted by a simple majority of the votes cast. Where the law requires a capital majority in addition to the voting majority, resolutions are adopted by a simple majority of the share capital represented in the vote.

The Articles of Association of the company specify the authorized share capital. The Executive Board is authorized, with the approval of the Supervisory Board and of E. Merck KG, to increase the share capital on one or several occasions until April 3, 2014 by up to a total of EUR 56,521,124.19 by issuing new shares against cash or contributions in kind. The company is not authorized to acquire its own shares.

The company has not entered into any material agreements subject to a change of control pursuant to a takeover offer nor has it concluded any compensation agreements with the members of the Executive Board or employees in the event of a takeover offer.

Successful bond issue

Due to the acquisition of Millipore, extensive financing measures were taken in 2010. A major component of the acquisition financing was a bond issue amounting to EUR 3.2 billion. This was the largest euro-bond transaction by a German company in Europe in 2010.

Merck benefited from attractive conditions as a result of the timing of the issue in March. In order to reach diverse investor groups and due to the high demand, the bond issue was structured into three tranches, each with different maturities. As a result, the maturities fit in well with Merck's overall bond profile.

The first tranche has an original term of two years. The volume is EUR 500 million and pays a coupon of 2.125%. The other two tranches each amount to EUR 1,350 million. One of these tranches runs until March 2015 and pays a coupon of 3.375%. The third tranche has a term of ten years, paying a coupon of 4.500%.

[Merck – an esteemed issuer in the bond market](#)

Since the financing measures for the Millipore acquisition have led to higher debt, the two rating agencies Standard & Poor's and Moody's revised their ratings. While Standard & Poor's issued a rating of BBB+ with a stable outlook on March 2, 2010 (previously: A-), Moody's adjusted its rating on July 16, 2010 from A3 before the acquisition to Baa2 (stable outlook). The financing measures have shown that Merck is an esteemed issuer in the capital market. Going forward, the debt market will continue to represent a major element of our corporate financing activities.

Rebismart™, our electronic injection device for the self-administration of Rebif®, is easy and convenient to use.



MERCK SERONO

Merck Serono is the largest division of Merck. It markets innovative prescription drugs of chemical and biotechnological origin. The division offers its leading brands in around 150 countries. Merck Serono focuses on highly specialized therapeutic areas such as Neurodegenerative Diseases, Oncology, Fertility, Endocrinology and Rheumatology.

KEY PRODUCTS BY THERAPEUTIC AREA

- Oncology: Erbitux® (solid tumors)
- Neurodegenerative Diseases: Rebif®, Movectro® (multiple sclerosis)
- Fertility: Gonal-f®, Pergoveris™, Luveris®, Ovitrelle®, Crinone®, Cetrotide® (infertility treatment)
- Endocrinology: Saizen® (growth hormone disorders), Serostim® (HIV-associated wasting), Kuvan® (metabolic disorder hyperphenylalaninemia), Egrifta™ (HIV-associated lipodystrophy)
- CardioMetabolic Care: Concor® franchise (cardiovascular diseases), Glucophage® franchise (type 2 diabetes), Euthyrox® (thyroid disorders)

KEY DEVELOPMENTS IN 2010

- Sales of Erbitux® rise by 18% to EUR 820 million, Rebif® sales increase by 8.6% to EUR 1,668 million
- Russian and Australian regulatory authorities approve cladribine tablets as the world's first oral disease-modifying treatment for multiple sclerosis (brand name: Movectro®)
- The Committee for Medicinal Products for Human Use of the EMA adopts a final negative opinion regarding the marketing authorization application for cladribine tablets in January 2011. In the United States, the FDA accepts the application for review; FDA feedback on the application is expected by the end of February 2011
- The Japanese drug regulatory authorities approve extended usage for Erbitux® in combination with chemotherapy for first-line treatment of metastatic colorectal cancer (KRAS wild-type tumors)
- Following a suspected unexpected serious adverse reaction we temporarily suspended all studies with the cancer immunotherapy Stimuvax® in March. Phase III trials resumed in non-small cell lung cancer in June
- Egrifta™ approved in the United States to reduce excess abdominal fat in HIV patients with lipodystrophy

STRONG GROWTH THANKS TO BIOTECH MEDICINES

Sales by the Merck Serono division grew far more strongly than the forecasted average for the pharmaceutical industry. Nearly two-thirds of this growth is attributable to the biopharmaceuticals Rebif® and Erbitux®.

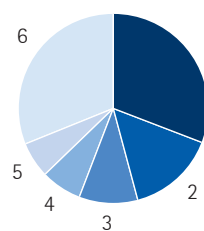
Five top-selling biopharmaceuticals account for 61% of sales

In 2010, the Merck Serono division increased total revenues by 7.6% to EUR 5,754 million. Sales increased by 8.3%, with positive currency effects accounting for 2.6% of the increase. This excellent growth, which exceeded the sector average of 4% to 5% estimated by IMS Health, was once again due to the success of our biopharmaceuticals. We generated EUR 3,288 million or 61% of our sales with our five top-selling biopharmaceuticals Rebif®, Erbitux®, Saizen®, Gonal-f® and Serostim®. Rebif®, a treatment for relapsing-remitting multiple sclerosis, was once again the top-selling product, with sales increasing by 8.6% to EUR 1,668 million. Erbitux®, our targeted cancer therapy, posted another double-digit increase in sales, which rose by 18% to EUR 820 million. In March, Erbitux® received approval in the key market of Japan for extended usage in combination with chemotherapy for the first-line treatment of metastatic colorectal cancer (KRAS wild-type tumors). Cladribine tablets (brand name Movectro®) were approved in Russia in July, becoming the world's first oral disease-modifying treatment for relapsing-remitting multiple sclerosis. Approval in Australia followed in September. In November, the U.S. Food and Drug Administration granted approval of Egrifta™ (tesamorelin for injection) to reduce excess abdominal fat in HIV-infected patients with lipodystrophy.

Our five top-selling drugs by sales in 2010

EUR million / % of divisional sales

1 Rebif®	1,668	31%
2 Erbitux®	820	15%
3 Gonal-f®	504	9%
4 Concor® franchise	373	7%
5 Glucophage® franchise	316	6%
6 Other products	1,727	32%



At EUR 344 million, royalty, license and commission income was slightly below the previous year's level. In comparison with 2009, the division's gross margin increased by 6.9% to EUR 4,793 million. Due to strong exchange rate effects and investments in new products and emerging markets such as China, marketing and selling expenses were 10% higher than in 2009. Research and development costs declined moderately by 1.4% to EUR 1,167 million. In total, non-recurring expenses were lower than in 2009. The largest single non-recurring item was the impairment loss for safinamide (see page 19). Overall, the operating result improved by 59% to EUR 565 million. Return on sales (ROS) increased to 9.8% in 2010. Underlying free cash flow grew by 51% to EUR 1,308 million.

Merck Serono | Key figures

EUR million	2010	2009	Δ in %
Total revenues	5,754	5,345	7.6
Gross margin	4,793	4,485	6.9
R&D	1,167	1,184	-1.4
Operating result	565	355	59
Exceptional items	69	-40	-
Free cash flow	1,298	864	50
Underlying free cash flow	1,308	867	51
ROS in %	9.8	6.6	

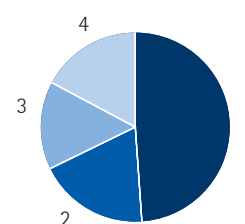
Growth driven by Asia, Africa, Australasia

As in the previous year, Europe was the division's top-selling region in 2010. Around one-half of the division's sales were achieved here. European sales increased by 2.9% to EUR 2,632 million. Our largest market within Europe was France, where sales totaled EUR 514 million. Sales there fell by 3.5%, due in part to generic competition faced by our CardioMetabolic Care business. Sales in Germany, our second-largest European market, stagnated at EUR 497 million (+0.1%) as a consequence of a restrictive health care policy. In Italy and Spain, sales increased by 7.1% and 1.8%, respectively, to EUR 308 million and EUR 294 million, putting them nearly on par with each another. Russia and Turkey were two examples of smaller markets that posted strong growth of 36% and 16%, respectively. However, sales in Greece declined by 13% because of the impact of the financial crisis on the health care sector.

Merck Serono | Sales by region

EUR million / % of divisional sales

1 Europe	2,632	49%
2 North America	1,035	19%
3 Latin America	809	15%
4 Asia, Africa, Australasia	932	17%



Double-digit sales growth
in Latin America

In North America, sales increased 9.4% to EUR 1,035 million, mainly due to the good performance of Rebif® and positive currency influences. Sales in Latin America increased by 14% to EUR 809 million. Brazil, our largest market in this region, posted sales growth of 36% to EUR 286 million. Mexico and Argentina also developed well, increasing sales by 22% and 44%, respectively. However, sales in Venezuela dropped by 54% because of strong currency effects. With sales increasing by 20% to EUR 932 million, the Asia, Africa, Australasia region was the division's geographic growth driver. Our largest market within this region was Japan. Thanks to the success of Erbitux®, sales increased there by 39% to EUR 177 million. With sales of EUR 126 million (+2.4%), China was our second-largest market in the region. We achieved growth of 18% in India, where sales totaled EUR 66 million. Sales climbed by 52% to EUR 39 million in South Africa and by 18% to EUR 60 million in Australia.

Our activities by therapeutic area

	Research	Development	Marketing
Oncology	■	■	■
Neurodegenerative Diseases	■	■	■
Rheumatology	■	■	
Fertility	■	■	■
Endocrinology		■	■
CardioMetabolic Care and General Medicine			■

ONCOLOGY

Our targeted oncology drug Erbitux® (cetuximab) is approved in combination with chemotherapy for all lines of treatment or as a monotherapy for pretreated patients in epidermal growth factor receptor (EGFR)-expressing, KRAS wild-type metastatic colorectal cancer (mCRC). In addition, the monoclonal antibody is a first-line standard for recurrent and/or metastatic squamous cell carcinoma of the head and neck (SCCHN) in combination with platinum-based chemotherapy, as well as in combination with radiotherapy for locally advanced head and neck cancer. Erbitux® is currently approved for use in colorectal cancer in 86 countries and in head and neck cancer in 82 countries around the world. We are exploring further indications in additional studies. Sales of Erbitux® continued on a growth course in 2010, increasing by 18% to EUR 820 million.

Approvals in Japan, Australia and Switzerland

Erbitux® in combination with chemotherapy available in Japan for colorectal cancer in all lines of treatment

In Japan, Erbitux® can now be used in combination with chemotherapy in the first-line treatment of patients with EGFR-expressing, inoperable, advanced or recurrent colorectal cancer carrying the KRAS wild-type gene. The Japanese Pharmaceutical and Medical Devices Agency (PMDA) granted approval of this extended usage for Erbitux® in March 2010 following submission of data from the Phase III CRYSTAL trial. Consequently, Erbitux® is now available for use in combination with chemotherapy for colorectal cancer in all lines of treatment in Japan. In Australia, the Therapeutic Goods Administration (TGA) approved Erbitux® in March 2010 as a first-line treatment in combination with chemotherapy for patients with KRAS wild-type mCRC. In Switzerland, Erbitux® was also approved in 2010 as a first-line treatment option for metastatic colorectal cancer patients with KRAS wild-type tumors. Swissmedic, the Swiss Agency for Therapeutic Products, granted the approval in September 2010.

Erbitux® is the standard of care in KRAS wild-type metastatic colorectal cancer

Merck is a leader in innovative, personalized cancer therapy. We are focused on research to identify biomarkers that will help to select the patients who will benefit the most from a specific drug – as is the case with Erbitux® and the KRAS wild-type status of tumors in patients with metastatic colorectal cancer. An international survey conducted in 2010 showed that KRAS mutation analysis is fast becoming an integral part of the management of mCRC. The survey revealed in addition that Erbitux® is now a standard of care for confirmed KRAS wild-type

mCRC. The share of patients in whom the test is performed in order to determine whether they can benefit from a personalized therapy, such as Erbitux®, increased from 2.5% in 2008 to 66% in early 2010. The results also show that 73% of physicians in Europe already routinely tested KRAS status at diagnosis of metastatic colorectal cancer. Data from two surveys, which were likewise presented in 2010, show that Erbitux® has become a standard of care in the treatment of both locally advanced and recurrent and/or metastatic SCCN. The results from the survey of 256 specialists in France, Germany, Italy and Spain in the latter indication showed that an Erbitux®-based treatment combination was used in almost 60% of cases in the first-line setting.

NEURODEGENERATIVE DISEASES

Within the Business Unit Neurodegenerative Diseases, we offer Rebif® (interferon beta-1a), one of the leading drugs for the treatment of relapsing-remitting multiple sclerosis (MS). According to estimates, around 2 million people suffer from MS worldwide. Owing to its proven efficacy and favorable risk-benefit profile, Rebif® is a basic treatment for MS and is approved in more than 90 countries. In 2010, sales of Rebif® increased by 8.6% to EUR 1,668 million. The recombinant protein was thus once again our top-selling product and remained the leading MS treatment outside the United States. With sales growing solidly by 6.2% to EUR 752 million, Europe was our strongest region for Rebif®. The largest markets were Germany and Italy, where we recorded growth rates of 6.0% and 8.5%, respectively. With sales of EUR 751 million, North America remained our second-largest market for Rebif®. Sales in this region grew by 11% over 2009. Sales in Latin America increased by 12% to EUR 108 million. In the region Asia, Africa, Australasia, sales increased by 2.2%.

The serum-free formulation of Rebif® with improved injection tolerability is now available in around 40 countries, including all EU member states, Australia, Canada and Switzerland, as well as a number of countries in Asia, Latin America, Africa, and the Middle East. Discussions with the U.S. Food and Drug Administration concerning a potential approval continue. Rebidose™ is the latest addition to our range of user-friendly injection devices for the self-administration of Rebif®. This single-use pen, which is prefilled with Rebif®, was approved in the European Union and Australia. Launched in 2009 as the first electronic injection device of its kind for MS, Rebismart™ is now available in more than 20 countries, including Canada and many EU countries.

Movectro® approved in Russia and Australia as an oral treatment for MS

Movectro® approved in Russia as the world's first oral disease-modifying drug for MS

In July, the Russian regulatory authorities granted marketing approval for cladribine tablets for the treatment of relapsing-remitting multiple sclerosis. This was the world's first approval of an oral disease-modifying therapy for multiple sclerosis. The next approval followed in Australia in September. Cladribine tablets have been available under the trade name Movectro® in both countries since the end of 2010. The approvals are supported by the results of the CLARITY study, which involved 1,326 patients with relapsing-remitting multiple sclerosis. The study results published in the New England Journal of Medicine showed that short-course treatment with cladribine tablets significantly reduced relapse rates, the risk of disability progression, and MRI measures of disease activity at 96 weeks.

We have submitted regulatory applications for cladribine tablets covering around 40 countries worldwide. We resubmitted our regulatory application in the United States in June. The U.S. agency accepted the application for filing in July and granted a Priority Review designation. The FDA informed us in November that it had extended its Priority Review period by three months to February 28, 2011 in order to have more time for a full review of additional information provided under the application. In September, the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) issued a negative opinion regarding the marketing authorization application for cladribine tablets. Since we are convinced of the potential of cladribine tablets as a new therapeutic option for people with multiple sclerosis, we appealed and requested re-examination of this opinion. In January 2011, the CHMP adopted a final negative opinion regarding our marketing authorization application.

FERTILITY

Double-digit increase in sales
in important growth markets

The Merck Serono division is the global leader with its portfolio of drugs to treat infertility. We are the only company that offers physicians and patients recombinant versions of the three main reproductive hormones that are important for the treatment of infertility. In 2010, sales by the Business Unit Fertility increased by 6.6% to EUR 657 million. We generated nearly half of our sales in Europe, which remains our largest market. In 2010, sales in Europe were slightly higher than in 2009. We recorded double-digit growth in the regions Asia, Africa, Australasia and Latin America, while sales increased slightly in North America.

Growth of Gonal-f® continues

Gonal-f® (follitropin alfa for injection) is a recombinant form of the natural follicle-stimulating hormone. It is approved in over 100 countries and is the world's leading female fertility drug. The injection device Gonal-f® pen for the self-administration of Gonal-f® is now available in more than 90 countries, including the largest EU markets, the United States and Japan. Sales of Gonal-f® grew by 3.7% to EUR 504 million, primarily as a result of strong growth of 15% in Asia, Africa, Australasia. Positive currency effects were responsible for more than half of the increase in this region. Gonal-f® was additionally approved in Japan in 2009 for the treatment of infertile women with irregular or absent ovulation. Consequently, sales increased sharply in 2010. In North America, Gonal-f® sales remained at the previous year's level in a declining and hotly contested market. In Europe, which accounts for nearly half of our Gonal-f® sales, we stopped the negative trend of 2009 and maintained sales at the previous year's level despite unabated cost containment pressure in the health care sector. In Italy, our largest European market for this product, sales remained just as stable as in France, our second-largest market. Spain is the third-largest market in Europe and is dominated by private payers, who continued to feel the effects of the economic crisis. Consequently, sales of Gonal-f® declined by 4.3%. By contrast, Gonal-f® performed well in the United Kingdom. Sales grew strongly in this market, mainly on an organic basis, increasing 31% over 2009.

Our recombinant combination treatment Pergoveris™ is used to stimulate follicular development in infertile women with severe follicle-stimulating hormone and luteinizing hormone deficiency. It is the first drug to allow the simultaneous administration of the two key hormones for ovarian stimulation in a single subcutaneous injection. Global sales, which are achieved almost exclusively in Europe, increased by 8.4% to EUR 32 million, primarily thanks to growth of 50% in France. Ovidrel®/Ovitrelle® is a recombinant version of the natural hormone hCG and is used to trigger follicle maturation and ovulation. Sales of Ovidrel®/Ovitrelle® grew strongly by 21% to EUR 45 million, thanks to good growth in all regions. Sales of Cetrotide®, a gonadotropin-releasing hormone antagonist used to prevent premature ovulation, also rose sharply by 23% to EUR 38 million.

[Merck Serono awards around EUR 1 million to further applied research projects in fertility](#)

Grant to promote innovative fertility projects

In June, Merck Serono announced the first recipients of funds from the Grant for Fertility Innovation. We set up this program for innovation in fertility in order to further medical research in this field. Around EUR 1 million was awarded to five innovative applied research projects that aim to help infertile couples improve their chances of conceiving. In the same month, we presented the results of the largest international study aimed at understanding the decision-making process of couples trying to conceive. The findings can help clarify disparities in fertility rates and reveal barriers that may prevent couples with infertility from seeking medical help. More than 10,000 men and women from 18 countries responded to the survey, which was developed in collaboration with Cardiff University in Wales (United Kingdom).

ENDOCRINOLOGY

[Our electronic autoinjector Easypod™ for the self-administration of Saizen® now also available in China](#)

The specialized therapies and user-friendly injection devices offered by the Business Unit Endocrinology can help improve the lives of patients with endocrine and metabolic disorders. Sales increased by 21% over 2009 to EUR 317 million thanks to strong growth in all regions. Our top-selling endocrinology product is Saizen®, a recombinant human growth hormone. Saizen® is approved in 79 countries for indications including the treatment of pediatric and adult growth hormone deficiency, Turner syndrome, growth failure in children associated with chronic renal failure, as well as to treat children born small for gestational age (SGA). According to estimates, growth hormone deficiency affects 330,000 children globally and 90,000 adults in Europe. Sales of Saizen® increased sharply by 18% to EUR 226 million. Our top-selling markets were Europe and North America. Latin America as well as Asia, Africa, Australasia showed strong, double-digit growth, also on an organic basis. The ongoing success of Saizen® was favorably impacted by the high acceptance of our electronic injection device Easypod™, which is now available in around 40 countries, including China, where it was approved in July. In order to make Saizen® even more user-friendly, we developed a ready-to-use liquid formulation that eliminates the need to prepare the powder for injection. Saizen® solution for injection was approved in Canada in April. A decentralized procedure was completed in the European Union in October, allowing national approvals in 18 EU member states in the coming

months. To ensure flexibility in meeting the individual needs of patients, the new formulation is available in cartridges of 6 mg, 12 mg and 20 mg, designed for exclusive use with Easypod™ and our needle-free auto-injector Cool.click™2.

With Kuvan® (sapropterin) for the treatment of hyperphenylalaninemia in patients with either phenylketonuria (PKU), a congenital metabolic disorder, or a deficiency of the key coenzyme tetrahydrobiopterin (BH₄), we began offering the first drug for this orphan disease in Europe in 2009. According to estimates, around 50,000 people are affected in Europe; 20% to 50% of PKU patients could benefit from treatment with Kuvan®, which Merck Serono markets in around 30 countries. In 2010, the product was approved in Switzerland and Croatia as well as a number of countries outside of Europe, including Australia, China (only for BH₄ deficiency), Israel, Mexico and Venezuela. Global sales rose to EUR 20 million.

Egrifta™ approved in the United States

Egrifta™ is the first FDA-approved drug to reduce excess abdominal fat in HIV-infected patients with lipodystrophy

Our drug Serostim® is used in the United States to treat patients suffering from HIV-associated wasting, which is estimated to affect up to 8% of HIV-infected individuals. Sales of Serostim® increased by 8.1% to EUR 70 million.

In November, the U.S. Food and Drug Administration (FDA) approved Egrifta™ (tesamorelin for injection) as the first, and so far only, treatment indicated to reduce excess abdominal fat in HIV-infected patients with lipodystrophy. Egrifta™ was developed by Theratechnologies, a Canadian biopharmaceutical company, and will be marketed in the United States exclusively by our subsidiary EMD Serono.

CARDIOMETABOLIC CARE AND GENERAL MEDICINE

We are expanding our position with CardioMetabolic Care products in many key growth markets

The Business Unit CardioMetabolic Care and General Medicine comprises our drugs for treating diabetes, cardiovascular diseases and thyroid disorders, as well as other products and regional specialties. The interrelationships that exist between many chronic cardiovascular and metabolic diseases are the causes of multiple complex clinical pictures that call for integrated therapeutic approaches. We are continually working to improve our products, for example by developing new dosage forms and strengths.

At EUR 1,888 million, sales by this Business Unit grew by 4.4%. We expanded our position in many dynamic markets. For example, our CardioMetabolic Care products have made us one of the fastest growing pharmaceutical companies in Latin America and Asia. In Latin America we rank among the top 15 pharmaceutical companies. However, price reductions in Europe and generic competition in France, our largest market in terms of sales, had a negative impact. Overall, the decline in sales of beta-blockers was more than offset by higher sales of diabetes and thyroid medicines.

Concor®: Strong performance in growth markets, fierce competition in Europe

Sales of branded Concor® products containing the active ingredient bisoprolol amounted to EUR 373 million. This was 5.3% less than in 2009. One reason was generic competition in France, where sales dropped by 35% to EUR 62 million. Yet in Europe, our largest market for this product group, bisoprolol remains the leading beta-blocker, used in products such as Lodoz® and Concor® COR.

Sales in Venezuela, our largest market in Latin America, suffered an inflation-induced decline of 50% to EUR 11 million.

By contrast, Concor® branded products were successful in growth markets. Sales in Africa, Asia, Australasia grew 30% to EUR 98 million.

Glucophage® franchise continues on a growth course

Seven million patients use oral metformin products from Merck Serono to treat their diabetes

Worldwide, around 285 million people suffer from type 2 diabetes and the number is rising. More than seven million patients worldwide rely on our oral metformin products to treat this condition. Metformin, which is contained in our product Glucophage®, remains the drug of choice for first-line treatment of type 2 diabetes.

The branded products from the Glucophage® franchise generated sales of EUR 316 million – an increase of 8.4%. Slight sales declines in Europe were more than offset by double-digit growth in the markets of Latin America and Asia. In Latin America, Glucophage® is the leading product in the diabetes market. With growth of 34%, sales outperformed the market by six percentage points on a U.S. dollar basis. In addition, product line extensions continued to perform successfully. Sales of Glucophage XR® rose by 21% to EUR 69 million. We had launched a 1000 mg dosage strength of this product in 2009. With Glucovance® 1000 mg/5 mg, a combination of the active ingredients metformin and glibenclamide, we began launching a new dosage strength in 2010.

Thyroid products show good growth

Merck is the world's largest supplier of drugs to treat thyroid disorders. Sales of these products grew by 7.6% to EUR 170 million. Despite generic competition, sales in Europe declined by only 1.3%. By contrast, sales in Latin America increased sharply by 30% and by 3.9% in Asia, Africa, Australasia. Sales of our key product, the thyroid hormone Euthyrox®, increased by 7.7% to EUR 148 million. Approximately 15 million patients in about 90 countries around the world receive treatment with Euthyrox®.

Worldwide, more than 300 million people suffer from hypothyroidism yet not even 20% of them are treated. We want to educate the public and promote optimum treatment of these disorders. Therefore, in May we conducted our second major public awareness campaign together with the International Thyroid Association. Activities took place in 45 countries.

Strong regional performance of other General Medicine products

Due to our good competitive positions in major markets outside Europe, our other General Medicine products, some of which are only sold in certain regions, generated sales of EUR 977 million. This was 5.4% more than in 2009.

RESEARCH AND DEVELOPMENT

At EUR 1,167 million, research and development spending was slightly lower (–1.4%) than in 2009. This decline is due on the one hand to the project delays experienced with Stimuvax® and cladribine tablets, and on the other hand to our successful efforts to optimize cost structures through efficiency enhancement measures. We invested around 20% of the total revenues of the Merck Serono division in R&D, which puts us at an above-average level within the pharmaceutical industry. This is mainly the result of the large number of cost-intensive studies in the final phase of clinical development. The pipeline currently comprises nine projects in Phase III clinical trials, seven in Phase II, and six in Phase I.

Our activities are focused on three areas: oncology, where we are seeking new therapeutic options for colorectal cancer, lung cancer, head and neck cancer, brain tumors, breast cancer and gastric cancer; neurodegenerative diseases, where we are working on new therapies for multiple sclerosis, Parkinson's disease and Alzheimer's disease; as well as rheumatology, which includes the autoimmune disease lupus erythematosus and osteoarthritis. We also continue to conduct research in the field of fertility. As of December 31, 2010, the division had around 3,000 employees working in research and development.

Our most important research centers are Darmstadt, Geneva and Boston. Additionally, we are expanding the Beijing site in order to cover Asia, to facilitate regional clinical trials, and to form local alliances. We plan to invest EUR 150 million and create more than 200 qualified positions here by 2013. The expansion work was completed as planned at the Billerica site, where we invested USD 65 million.

Networks and partnerships help to address challenges

Generic competition, health care reforms, price pressure, increasing regulatory requirements placed on safety, and health technology assessments of new drugs are some of the trends that are posing challenges in the pharmaceutical R&D environment. We want to ensure sustainable success despite rapidly changing framework conditions. Essential elements of this strategy include focusing on specialist indications with high unmet medical needs, rigorously implementing treatment options adapted to specific patient groups (patient stratification) in order to predict the efficacy of therapies in individual patients, and cooperating with partners. We further expanded our network of alliances in 2010.

In R&D, we continue to build on our expertise in both small molecules and biopharmaceuticals. We are also investigating potentially new compound classes that could lead to innovative therapies. For example, we entered into a partnership with the Belgian company Ablynx to co-discover and co-develop Nanobodies® for use in the area of rheumatology. Nanobodies® are an innovative class of antibody-derived therapeutic proteins that combine the advantages of conventional antibodies with key properties of small molecule drugs.

Funding of innovative projects in multiple sclerosis research

In the field of neurodegenerative diseases, we formed an exclusive partnership with Fast Forward—a subsidiary of the American National Multiple Sclerosis Society. In 2010, we gave grants to four recipients. The funding, which will initially amount to nearly USD 1.5 million, will be used to advance innovative multiple sclerosis research projects in the United States, New Zealand, and the United Kingdom. In addition, we entered into a strategic cooperation with the Institute

Status of our innovative compounds

Therapeutic area	Compound	Indication	Status
Oncology	Erbitux® (cetuximab, monoclonal anti-EGFR antibody) ¹	Adjuvant colorectal cancer ²	Phase III
		Gastric cancer	Phase III
	Cilengitide (integrin inhibitor)	Glioblastoma (brain tumor)	Phase III
	Stimuvax® (cancer immunotherapy) ³	Non-small cell lung cancer (NSCLC)	Phase III
	Erbitux®	Breast cancer	Phase II
	Cilengitide	Head and neck cancer (SCCHN)	Phase II
		Non-small cell lung cancer (NSCLC)	Phase II
	Monoclonal anti-integrin antibody (DI17E6)	Colorectal cancer	Phase II
	TLR9 immunomodulator (IMO–2055) ⁴	Head and neck cancer (SCCHN)	Phase II
	MEK inhibitor (AS703026/ MSC1936369B)	Solid tumors and hematological diseases	Phase I
	c-Met kinase inhibitors (EMD1214063, EMD1204831) ⁵	Solid tumors	Phase I
Neurodegenerative Diseases	Serum-free formulation of Rebif®	Relapsing-remitting forms of multiple sclerosis (MS)	USA: applica- tion submitted
		Clinically isolated syndrome (CIS)	Phase III
	Cladribine tablets	Relapsing-remitting forms of MS; Russia and Australia: approved, USA: application submitted ⁶	Approved/ applications submitted
		Clinically isolated syndrome (CIS)	Phase III
	Safinamide ⁷	Early-stage Parkinson's disease	Phase III
		Mid- to late-stage Parkinson's disease	Phase III
	Immune-tolerizing agent (ATX-MS-1467) ⁸	Relapsing-remitting forms of MS	Phase I
	Extended-release formulation of interferon beta-1a ⁹	Relapsing-remitting forms of MS	Phase I
Rheumatology	Atacicept (anti-BLYS/anti-APRIL fusion protein) ¹⁰	Systemic lupus erythematosus (SLE)	Phase III
	Fibroblast growth factor 18 ¹⁰	Cartilage injury	Phase II
		Osteoarthritis	Phase I
Endocrinology	Long-acting growth hormone (ARX 201) ¹¹	Growth hormone deficiency	Phase II

¹ Developed in cooperation with ImClone LLC: Erbitux® is a trademark of ImClone LLC, a wholly owned subsidiary of Eli Lilly & Co.

² Sponsored and coordinated by the Fédération Francophone de Cancérologie Digestive (FFCD)

³ Exclusive worldwide licensing rights acquired from Oncothyreon Inc.

⁴ In-licensed from Idera Pharmaceuticals, Inc.

⁵ Collaboration with M. D. Anderson Cancer Center

⁶ CHMP adopted a final negative opinion on the marketing authorization application in the EU in January 2011

⁷ Collaboration with Newron Pharmaceuticals S.p.A.

⁸ Collaboration with Apitope Technology (Bristol) Ltd.

⁹ Collaboration with Flamel Technologies S.A.

¹⁰ In-licensed from ZymoGenetics, Inc., a wholly owned subsidiary of Bristol-Myers Squibb Company

¹¹ Collaboration with Ambrx, Inc.

NSCLC: Non-small cell lung cancer

SCCHN: Squamous cell carcinoma of the head and neck

CIS: Clinically isolated syndrome

for Experimental Neurology (INSPE) and the Department of Neurology at the San Raffaele Scientific Institute in Milan, Italy. The aim of the cooperation is to advance clinical research projects in the field of neurodegenerative diseases using new models and technologies. Merck Serono Ventures is the name of our corporate venture capital fund. In 2010, the fund invested in two highly innovative biotech companies. One of the companies is f-Star from Vienna, Austria, which is engaged in the discovery and development of modified antibodies. The most recent investment was made in Auxogyn of San Francisco. This company is developing a non-invasive tool for early assessment of embryo viability within the scope of in vitro fertilization procedures. Additionally, internal cooperation with Merck Millipore is creating new prospects. Potential synergies exist in areas such as companion diagnostics, systems biology, new biopharmaceutical drug delivery methods, and in the search for new routes in biopharmaceutical production.

New data on Erbitux® for first-line treatment of metastatic colorectal cancer

Research and development: Additional potential for Erbitux®

Further analysis of the Phase III CRYSTAL trial once again confirmed the therapeutic value of Erbitux®. New data show that patients with KRAS wild-type metastatic colorectal cancer (mCRC) who experienced early tumor shrinkage during first-line Erbitux®-based treatment had an unprecedented overall median survival of 28.3 months. Further Phase III studies are being conducted in gastric cancer (EXPAND) and adjuvant colorectal cancer (PETACC-8). Initial results of the randomized Phase II trial BALL-1 demonstrated the therapeutic potential of Erbitux® in breast cancer. Treatment with Erbitux® in combination with chemotherapy showed positive results in patients with metastatic triple-negative breast cancer (TNBC). Median progression-free survival in women treated with Erbitux® plus chemotherapy more than doubled. Although tumor response nearly doubled, the primary endpoint of the study, response rate, was not met. TNBC is aggressive, difficult to treat, and associated with high rates of metastasis and relapse.

Stimuvax®: Clinical program resumed, obstacles successfully overcome

In June, Merck resumed the Stimuvax® (BLP25 liposome vaccine) clinical program in patients with non-small cell lung cancer (NSCLC), which includes the Phase III studies START and INSPIRE. The treatment and enrollment of patients has restarted after approval by the local regulatory authorities and ethics committees. This was made possible by a decision by the U.S. Food and Drug Administration (FDA) to partially lift the clinical hold and allow the START trial to resume. The Phase III STRIDE trial in advanced breast cancer was the study that remained on clinical hold by the FDA. Merck Serono decided to close this study.

The clinical hold was put in place by the FDA in March 2010 following a suspected unexpected serious adverse reaction. A patient participating in a Phase II exploratory clinical trial with the cancer immunotherapy in multiple myeloma developed encephalitis. Since 2007, we have been conducting the START trial to evaluate the efficacy and safety of the treatment with Stimuvax® in patients with inoperable stage III non-small cell lung cancer. The decision to initiate this trial was based on the results of a randomized Phase IIb study, in which Stimuvax® showed an increase in overall survival of a subset of patients with locoregional stage IIIb NSCLC from 13.3 months in the control group to 30.6 months in the treatment group. In 2009, we initiated INSPIRE, a Phase III trial in NSCLC in Asia. Should the Phase III trials be successfully completed, this cancer immunotherapy could play an important role in the treatment of lung cancer patients, for whom current therapeutic options are still limited.

Cilengitide trial provides long-term follow-up data in glioblastoma patients

Cilengitide is the first integrin inhibitor in oncology to have entered Phase III clinical development. In the CENTRIC trial, we are studying this compound in glioblastoma (GBM), the most aggressive type of brain tumor. Integrin inhibitors are thought to work by targeting tumor cells and the vascular network required to nourish the tumor and promote cancer cell growth. Long-term follow-up data from a randomized Phase II study of two different cilengitide doses in recurrent glioblastoma were published in 2010. They showed that 37% of patients who received the higher dose of cilengitide (2000 mg) were still alive after one year. The current prognosis of patients with recurrent glioblastoma is poor with median overall survival between four and seven months and one-year survival rates of approximately 20%.

Pipeline: All resources focused on promising projects

Merck Serono remains highly committed to research and development in oncology

Merck Serono remains committed to its discovery and development work in the therapeutic area of oncology. Our aim is to offer patients with high unmet medical needs additional therapeutic options in various indications. An important step toward this aim is the worldwide research and development agreement entered into with Sanofi-Aventis at the end of 2010. This agreement allows the experimental combination of Merck's MEK inhibitor with one of two early compounds of the partner, respectively.

We are currently investigating three compounds in Phase I studies in solid tumors and hematological diseases. In addition, five Phase II studies are underway in breast, head and neck, non-small cell lung as well as colorectal cancer.

Since our pipeline includes numerous compounds with high therapeutic potential, we remain committed to moving forward those projects with the greatest promise of sustainable success. At the same time, we will terminate or divest at an early stage those projects that appear to be less promising. This enables us to ensure that our resources are deployed to benefit patients and to manage the risks for our company. In 2010, we terminated the following four early-stage oncology projects: an aurora-kinase inhibitor and the monoclonal antibody sonepcizumab in Phase I; the immunocytokine tucotuzomab celmoleukin and the monoclonal antibody adecatumumab in Phase II.

Rebif® significantly delayed
conversion to clinically definite
MS in patients with CIS

Efficacy of Rebif® demonstrated in clinically isolated syndrome

Within our Neurodegenerative Diseases therapeutic area, we are conducting research to discover new therapeutic options for multiple sclerosis (MS) and Parkinson's disease – two indications with high unmet medical needs. In REFLEX, a two-year Phase III study involving more than 500 patients, we investigated whether patients with clinically isolated syndrome (CIS) at risk of developing MS could benefit from treatment with the serum-free formulation of Rebif®. Study participants with this clinical picture have so far experienced a single MS-like episode, such as optical or sensory disturbances, and have characteristic MRI lesions, putting them at high risk of developing clinically definite multiple sclerosis. At this early stage, these patients have not yet been given a clinically definite diagnosis, yet they are at risk of developing MS. The trial, which was completed in October, met its primary endpoint by demonstrating that Rebif® significantly delays conversion to clinically definite MS in these patients. A three-year double-blind extension of the REFLEX study, called REFLEXION, is currently ongoing in order to provide long-term follow-up data.

Progress made with the further development of cladribine tablets

With cladribine tablets, the Merck Serono division is developing a drug for the oral, short-course treatment of relapsing-remitting multiple sclerosis. In 2010, we received regulatory approvals in Russia and Australia. Our regulatory application received a negative opinion in the European Union. It is currently under review in the United States (see page 51). The clinical development program for cladribine tablets is designed to evaluate the potential therapeutic effects of cladribine tablets in various stages of the disease. Following the successful completion of the CLARITY study, a two-year extension with around 800 patients is currently underway to provide data on the long-term safety and efficacy of cladribine tablets as a monotherapy in relapsing-remitting MS. The two-year Phase III ORACLE-MS study is investigating cladribine tablets as a monotherapy in patients with clinically isolated syndrome. In November, we completed the recruitment of more than 600 study participants. In the Phase II ONWARD study, we are evaluating the safety and tolerability of adding cladribine tablets to established treatment with interferon beta.

Safinamide study misses endpoint,
but confirms effect on motor
function and safety profile

Long-term study completed with safinamide in late-stage Parkinson's disease

Together with our partner Newron, we are developing safinamide as an oral adjunctive therapy for patients with various stages of Parkinson's disease, which affects an estimated three million people in industrialized countries. In 2009, we had successfully completed the first Phase III clinical trial of safinamide administered as an add-on therapy to levodopa standard treatment in patients with advanced Parkinson's disease (Study 016). Motor function and the ability to perform daily activities improved significantly in patients treated with safinamide compared to placebo. An 18-month extension study (Study 018) was intended to provide data on the long-term efficacy and safety of safinamide in this indication. We announced the results of this long-term study in November 2010. The primary efficacy endpoint measuring dyskinesia after 24 months of treatment was not met. We therefore reassessed the sales potential of safinamide and recorded an impairment (see page 19). By contrast, the results of the analysis of the main secondary endpoint were consistent with the effect on motor function observed in

Study 016. The data from Study 018 also confirm the safety profile of safinamide. With SETTLE, a further Phase III clinical trial is underway in this indication. In the MOTION study, a Phase III clinical trial, we are evaluating safinamide as an add-on therapy to a dopamine agonist in early Parkinson's disease.

Increasing the success rate after in vitro fertilization

The objective of fertility research and development work at Merck Serono is to help infertile couples at every stage of the reproductive cycle – from follicular development to early pregnancy – to realize their dream of having a child. The innovative drugs and application devices must offer patients maximum ease of use and increase the probability of a pregnancy. In this way, we want to further expand our leading position in the treatment of infertility. Our ongoing research efforts are focused on drugs, technologies and support services that will improve the success rate of in vitro fertilization (IVF) procedures, and thus ultimately increase the take-home baby rate.

Focusing on Rheumatology

In the field of autoimmune and inflammatory diseases, we shifted our focus to rheumatological diseases and consequently renamed this therapeutic area. Our research and development work is centered on molecules that modulate the key pathogenic mechanisms of these diseases. We are developing the recombinant protein atacicept for the treatment of systemic lupus erythematosus (SLE), an inflammatory rheumatological disease. This innovative compound blocks the two immunomodulatory factors APRIL and BlyS. They are important for the survival and the proliferation of lymphocytes that trigger an abnormal immune reaction against the patient's own normal tissues. SLE is a chronic autoimmune disease that mainly affects women and is an area of great unmet medical need. We are currently conducting a Phase II/III clinical trial with atacicept in SLE. Lupus nephritis (LN) is a particularly severe form of SLE involving the kidneys. We are currently adapting the clinical development plan for atacicept in this indication after having discontinued a Phase II/III study in 2008.

Phase II study of FGF 18 started in a new indication, the treatment of knee cartilage defects

Thanks to its novel mechanism of action, fibroblast growth factor 18 (FGF 18) could be the first disease-modifying treatment for osteoarthritis and the repair of cartilage damage following injury. In the laboratory, FGF 18 has been shown to stimulate the regeneration of defective articular cartilage. FGF 18 may support the healing of degenerative joint disease. We successfully completed a Phase I trial of patients with osteoarthritis of the knee joint. A further clinical trial in osteoarthritis is still in progress. We are investigating the efficacy of FGF 18 in the treatment of knee cartilage defects in a Phase II trial that we initiated in 2010.

Research and development on growth disorders and metabolic diseases

The aim of our research and development efforts in endocrinology is to offer patients with growth disorders and metabolic diseases new therapeutic options or improved versions of established products based on our own development work or cooperation with partners. The most recent examples include Egrifta™ (tesamorelin for injection) for the reduction of excess abdominal fat in HIV-infected patients with lipodystrophy, as well as the development of a liquid formulation of Saizen® for injection.

Sales of the well-established Nasivin® range grew by 23% to EUR 52 million in 2010.



CONSUMER HEALTH CARE

The Consumer Health Care division offers high-quality over-the-counter products for preventive health care and self-treatment of minor ailments. Its product range includes global, scientifically based branded products that consumers trust. Consumer Health Care is represented in many countries of Europe, North America, Latin America, Asia and Africa.

KEY PRODUCTS

- Mobility: Products to strengthen the joints and relieve pain, including the brands Seven Seas®, Flexagil® and Kytta®
- Everyday health protection: Probiotic multivitamin ranges Bion® and Multibionta®; vitamins and minerals sold under brand names such as Cebion® and Diabion®
- Women's and children's health: Femibion® includes products with folic acid and Metafolin® for pregnant and nursing women; Kidabion® (Haliborange®), a vitamin range for children
- Cough and cold: Cold treatment Nasivin® (Iliadin®); flu treatment Sedalmerck®

KEY DEVELOPMENTS IN 2010

- Stable growth, with many countries clearly exceeding market growth
- Strategic brands reinforced: Double-digit growth for Femibion®, Bion®, Seven Seas® and Nasivin®
- Femibion®: a growth driver in Poland, Germany and France
- Bion® range: strong increases in France, Belgium and Chile
- Nasivin®: strong sales growth in Poland, Russia, South Africa and India
- Research and development further expanded
- Higher expenses due to restructuring measures in China, impairment losses in Mexico, and a warehouse fire in the United Kingdom
- Negative currency effects in Venezuela, one of the division's largest Latin American markets; positive currency effects in Mexico, the United Kingdom and Indonesia

SOLID SALES DEVELOPMENT

The Consumer Health Care Division stabilized its growth course, growing in line with western Europe, its main market. The global sales of our strategic brands performed well, posting double-digit growth.

Focus on four health themes

Consumers trust Merck

Consumer Health Care specializes in over-the-counter products and focuses on four health themes: Cough and Cold, Mobility, Everyday Health Protection, and Women's and Children's Health. The main distribution channels for our products are pharmacies, as well as retail chains, drug stores and mail order in some countries and certain markets. We are building on the strength of our well-known brands and the long-standing trust consumers place in them with respect to their quality and efficacy.

Consumer Health Care | Key figures

EUR million	2010	2009	Δ in %
Total revenues	472	467	1.1
Gross margin	317	319	-0.8
R&D	25	19	28
Operating result	14	48	-71
Exceptional items	-	-	-
Free cash flow	45	49	-7
Underlying free cash flow	45	49	-7
ROS in %	2.9	10.3	

Above-average market growth in many countries

Business in focus countries develops well

In 2010, total revenues of the Consumer Health Care division rose by 1.1% to EUR 472 million. We thus achieved stable growth and grew in line with the market in western Europe, our main market. We recorded organic growth of 2.6% worldwide and exceeded average market growth in many countries. The cornerstones of our strategy are strong brands and regional expansion. With a few exceptions, our focus countries performed well. In one important market, Venezuela, negative currency effects impacted business. In China, we undertook extensive restructuring in the third and fourth quarters. We had expanded outside the four major cities of Beijing, Shanghai, Guangzhou and Shenzhen too quickly. As a consequence, we ended up with considerable stocks that were not being pulled through to consumers. Having concluded an exclusive agreement with the Chinese Medical Doctors Association to offer Diabion in major hospitals, we did not receive the necessary government permission to allow doctors to prescribe the product. Adjusted for the effects in China, the division posted organic growth of 5.2%.

Research and development expanded

The operating result of the Consumer Health Care division declined by 71% to EUR 14 million. ROS was 2.9% compared with 10.3% in 2009. Underlying free cash flow was EUR 45 million, which was 7% lower than in 2009. In addition, higher impairment losses in Mexico lowered the operating result. We also incurred losses due to a fire in a warehouse in the United Kingdom. At EUR 25 million, research and development spending in the Consumer Health Care division was 28% higher than in 2009.

Strategic brands post increases

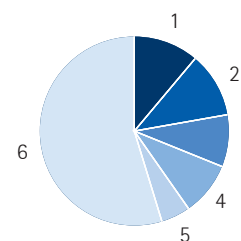
[Femibion® shows strong growth](#)

With one exception, the global sales of our five strategic brands developed positively, posting double-digit increases. The Bion® range generated global sales of EUR 54 million, an increase of 11%, of which France contributed the vast majority, or EUR 32 million. Femibion® grew by 24%, generating sales of EUR 41 million. Its strongest markets are Germany and Poland. France also recently reported strong increases. Seven Seas® recorded a slight sales decline of 1.4% in its core UK market. However, thanks to the positive developments in other countries, sales grew by a total of 14% to EUR 44 million. Nasivin® sales grew by 23% to EUR 52 million, driven primarily by good performance in Poland, Russia, South Africa and India. The Kytta® brand, which is primarily marketed in Germany, registered a 21% decline in sales to EUR 15 million. The development of Kytta in Germany was attributable to overproportionate increases in advertising spending by our competitors compared to 2009.

Top five brands by sales in 2010

EUR million / % of divisional sales

1 Bion®	54	11%
2 Nasivin®	52	11%
3 Seven Seas®	44	9%
4 Femibion®	41	9%
5 Cebion®	27	6%
6 Other products	252	54%



[Europe – our number-one region](#)

More than two-thirds of sales generated in Europe

By region, our sales breakdown as follows: 71% in Europe, 17% in Latin America and 12% in Asia, Africa, Australasia. Europe thus remains our largest market with sales of EUR 331 million, an increase of 3.8% over 2009.

France: our largest market

France remains our top-selling country, posting sales of EUR 101 million, or 1.8% more than in 2009. The Bion® range again performed very well, securing its position as the second-leading brand in the French OTC market and as number one for nutritional supplements. Femibion® Maman Active for young mothers was launched in France in 2010.

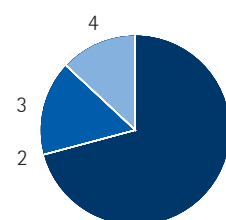
Apaisyl® range expanded

Apaisyl® is a very well-known brand in France, which focuses on head lice, skin irritations and mycoses. New products for nail fungus, chapped hands and herpes were added to this product range. The Médiflor® range was also expanded to include a product for sore throats.

Consumer Health Care | Sales by region

EUR million / % of total divisional sales

1 Europe	331	71%
2 North America	1	0%
3 Latin America	81	17%
4 Asia, Africa, Australasia	57	12%

**Femibion®: the clear market leader in Germany**

Germany has replaced the United Kingdom as our second most important market. In 2010, our German subsidiary Merck Selbstmedikation GmbH marked its 40th anniversary. Sales in Germany totaled EUR 57 million, representing growth of 1.7%. With a market share of more than 50%, Femibion®, which was launched in Germany 15 years ago, is the clear leader in its market segment, growing by 4.4% in 2010. In the Femibion® range, we launched Flor Intim, a probiotic product to protect and foster healthy vaginal flora. Very good sales were generated by Cape June®, our brand of diet products distributed directly through the QVC home shopping network.

A difficult environment in the United Kingdom

In the United Kingdom, a difficult market environment caused sales to drop by 0.7% to EUR 54 million. Femibion®, which was launched here in 2009, did not meet expectations. Our Lamberts Healthcare line showed a positive trend; this brand specializes in the direct sale of nutritional supplements and focuses heavily on e-commerce.

At EUR 27 million, sales in Belgium remained stable at a high level. Poland showed very positive growth of 18%, reaching EUR 29 million. Consumer Health Care also saw strong increases in Russia, Hungary, Austria and Turkey.

Currency effects in Latin America

In Latin America, total sales decreased by 9.6% to EUR 81 million. This was attributable to exchange rate losses in Venezuela, one of our most important markets in Latin America after Mexico. Although we achieved organic growth of 30%, sales in Venezuela dropped by 52%. In terms of total sales, the positive sales growth in Mexico (7.1%), Brazil (14%) and Chile (45%), for example, was unable to completely compensate for Venezuela. However, we achieved 11% organic growth in the region.

To expand our position in Latin America, we opened a new research and development center in Brazil. The center serves as an R&D hub for Brazil and neighboring countries. The center's goal is to develop regional solutions for the successful strategic brands of Merck Consumer Health Care. This means that existing products and future developments from the worldwide portfolio are to be adapted to regional conditions and local regulatory requirements.

Growth in major Asian markets

In Asia, sales declined by 4.8% as a result of the aforementioned development in China. We achieved growth in all our major Asian markets, for example in Indonesia (42%), our main market, as well as in India (42%) and Malaysia (22%). In Indonesia, we celebrated the 35th anniversary of Sangobion®, our main product in this market. This is a supplement to prevent iron deficiency and anemia in children and adults. In the Philippines, sales grew by 47%, primarily driven by the successful launch of Sangobion® in direct sales.

After continuous growth in previous years, South Africa, by far the most important market in Africa, once more saw significant increases, rising by 29% to EUR 9.2 million. Our Slow-Mag® line of magnesium products is the clear market leader there, holding a 70% market share. We have expanded this product line to include SlowMag® Active+, a magnesium supplement containing vitamins, ginseng, guarana and zinc.

Research and development

R&D spending increases

In 2010, we completed the realignment of our research and development organization, which we had started in 2009. As part of our evidence-based approach to OTC products, we stepped up our investment in clinical studies for additional indications (as in the case of Kytta®). This will enable us to meet increased regulatory requirements and further substantiate our health claims based on the study results. The regulatory requirements at the EU level are increasing for dietary and nutritional supplements as well. We are meeting these requirements through far-reaching trials, such as those for Bion®, Flexagil® and Femibion®.

Milli-Q® and Elix® laboratory
water purification system:
Ultrapure water for research
laboratories around the world



MERCK MILLIPORE

With the completion of the acquisition of Millipore on July 14, 2010 and the resulting formation of the Merck Millipore division, a world-class partner to the life science industry was created. The new division combines the Millipore businesses with the majority of Merck's Performance & Life Science Chemicals division. Merck Millipore comprises three business units: Bioscience sells products used by life science laboratories in academia and industry; Lab Solutions supplies general lab products and equipment for applications in both life science and industrial markets; and Process Solutions markets products used in the production of chemical and biopharmaceutical drugs. All three business units increased their total revenues in 2010.

KEY PRODUCT GROUPS

- Products for protein research and cell biology, e.g. multiplex immunoassay and ELISA kits, protein detection products, as well as flow cytometry instruments and kits
- Laboratory chemicals and consumables for research, educational and industrial applications in organic and inorganic chemistry, chromatography, food and environmental analysis as well as microscopy and lab water instruments, consumables and services to meet diverse water purification needs
- Products used in the manufacture of biopharmaceutical drugs and to support clarification, purification, viral clearance, sterile filtration, process monitoring and process development through scale-up to full-scale production

KEY DEVELOPMENTS IN 2010

- Acquisition of Millipore closes on July 14, figures consolidated for the first time in the third quarter, integration almost completed
- Total revenues amount to EUR 1,681 million, return on sales 2.6%
- Strong sales performance driven by growth in the Americas and Asia, strong demand from global biotech customers, and the positive impact of new product introductions
- Nearly 40% of total revenues generated in Europe, Merck Millipore's largest market

ACCELERATING THE INNOVATION STRATEGY

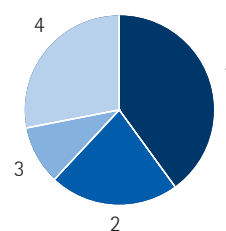
In 2010, the division continued to accelerate its innovation strategy, launching several critical new products such as Scepter™, the world's first automated handheld cell counter. With a broad-based portfolio, Merck Millipore is focusing on the growing demand for integrated and more sophisticated research tools from the life science industry.

Total revenues of Merck Millipore amounted to EUR 1,681 million in 2010. This corresponds to growth of 81%. The revenues and expenses of Millipore have been included since July 2010. Organic growth of the division, meaning excluding acquisitions and currency effects, amounted to 5.6%.

Merck Millipore | Sales by region

EUR million / % of divisional sales

1 Europe	657	39%
2 North America	394	24%
3 Latin America	157	9%
4 Asia, Africa, Australasia	465	28%



The realignment of the Chemicals business sector as a result of the acquisition is enabling Merck to achieve leading positions in high-margin, fast-growing markets, e.g. the biotech industry

Merck Millipore generated nearly 40% of its total revenues in Europe, the division's largest market. Double-digit growth rates were achieved in the other regions, not least thanks to the acquisition. The division also recorded organic sales growth, with Asia posting a double-digit increase.

The operating result of the Merck Millipore division was EUR 44 million, corresponding to a decline of 58.7% compared to 2009. It should be noted here that the operating result for 2010 was lowered by transaction and integration costs of EUR 87 million. Moreover, cost of sales, and consequently gross margin, were impacted by one-time expenses of EUR 86 million in connection with the purchase price allocation for the acquired Millipore inventories (more information can be found under "Financial position and results of operations"). Additionally, the division bore the ongoing amortization expense for the acquired intangible assets recognized within the scope of the purchase price allocation. In total, amortization of intangible assets was EUR 96 million and related almost exclusively to the second half of 2010.

Merck Millipore | Key figures

EUR million	2010	2009	Δ in %
Total revenues	1,681	929	81
Gross margin	871	434	101
R&D	78	32	141
Operating result	44	106	-59
Exceptional items	-	11	-
Free cash flow	-4,672	123	-
Underlying free cash flow	263	128	106
ROS in %	2.6	11.5	

The division's ROS amounted to 2.6% compared to 11.5% in 2009. Underlying free cash flow was EUR 263 million compared to EUR 128 million in 2009.

Strong position in fast-growing markets

The realignment of the Chemicals business sector as a result of the acquisition is enabling Merck to achieve leading positions in high-margin, fast-growing markets, e.g. the biotech industry. The company is now even less exposed to economic cycles. The steady, resilient revenue stream from the Merck Millipore division balances the Liquid Crystals business within Performance Materials and the Pharmaceuticals business sector. Merck Millipore is positioned globally as a strategic supplier driven by innovation, premium brand products, and competitive differentiation in increasingly competitive sectors.

BIOSCIENCE

For easier and more efficient research

With its products for life science research in the pharmaceutical and biotechnology industries as well as academia, the Bioscience Business Unit accounts for about 20% of the division's total revenues. It is focused on offering solutions that help scientists to conduct life science research easily, efficiently and economically.

The Bioscience Business Unit provides an increasing number of tools and services to support researchers seeking to understand complex biological systems as well as to identify and characterize new therapeutic targets.

Tools and services from our Bioscience Business Unit help researchers meet increasing demands as pharmaceutical researchers come under increasing competitive pressure to screen and identify new drugs with more speed and accuracy.

Therefore, our goal is to create products and services that simplify the work flow for researchers, offering consolidated and validated solutions. The business unit's products help to advance life science research in a wide variety of areas ranging from neuroscience, infectious disease, oncology, and metabolic disorders to stem cells, cell signaling, nuclear function, and chromatin biology.

Thousands of products developed
for applications in protein research
and cell biology

Products for protein research and cell biology

The Bioscience Business Unit sells thousands of products, primarily into the protein research and cell biology markets. These include instruments, consumable devices, reagents and services to help customers better understand diseases and biological functions. Their work typically involves conducting experiments on biological samples, such as cells, proteins, and nucleic acids. Merck Millipore also offers a wide variety of kits that improve research productivity and efficiency. Kits enhance research productivity by combining in one box all the disposables, reagents, and protocols needed to reliably and reproducibly conduct a particular experiment.

Measuring the effect of drugs on protein biomarkers

Within the protein research market, we offer multiplex immunoassay and ELISA kits, protein detection products, and flow cytometry instruments and kits. Researchers use our multiplex immunoassay kits to understand which proteins may be indicative of a disease state, measure how a drug affects protein biomarkers, and determine what side effects a drug creates. We are developing multiplex kits, reagents, and assays for researchers studying immunology, inflammation, and metabolic diseases (e.g. diabetes, obesity, cardiovascular disorders).

An integrated range

The Bioscience Business Unit is increasingly seeking to integrate instrumentation, reagent kits, validated protocols and technical support. One example of this approach is in flow cytometry, where we are bringing the advantages to the bench tops of cell biologists.

A major challenge for our customers is to find promising drug candidates faster and then ensure that they will not generate unwanted or unexpected side effects in clinical trials or when they are commercially available on the market. To improve the efficiency and economy of this research, customers outsource research work to the Bioscience Business Unit rather than conduct

the work in-house. We provide services to identify disease targets and better understand how to improve the efficacy of drugs on targeted patient groups and prevent side effects.

Merck Millipore's service offering helps customers better understand the safety and efficacy of biologic drugs and vaccines. With the increasing development of biologics, companies are leveraging our expertise to help them evaluate the efficacy of these drugs. We offer our customers a broad range of services to assist with evaluating and advancing these therapeutics from the drug development pipeline to the market. The offering includes biomarker analytical services, assay transfer/development, validation and sample analysis, pharmacokinetics, toxicokinetics, immunogenicity, biological potency, and vaccine services.

LAB SOLUTIONS

Contributing to excellence in science and analytics

The Lab Solutions Business Unit supplies products for research, analytical and clinical laboratories in a wide variety of industries. Accounting for about 40% of the division's total revenues, it is one of the leading suppliers of laboratory chemicals, lab water equipment and consumables. Merck Millipore has a strong track record of developing packaging concepts and chemical packaging that protect high-quality solvents prior to use. In addition, the division is the leading supplier of lab water and water treatment technologies.

For inorganic chemistry, we offer reagents of high purity such as salts, acids, caustics, volumetric solutions, buffers, reference materials for instrumental analysis and products for inorganic trace analysis. For organic chemistry, we supply a full range of basic products for synthesis, including building blocks, reagents and solvents most commonly used in organic synthesis from laboratory scale to bulk production.

As a supplier of chromatography products, Merck Millipore is also advancing the development of analytical separation technologies. The product focus is on analytical high-performance liquid chromatography (HPLC) and innovations to the monolithic Chromolith® HPLC columns for ultrafast separations.

Stringent requirements in food and environmental analysis

We have tailored our testing products for food, water and waste water analysis, spectrophotometry and quality control to growing analytical demand. This includes products such as the spectrophotometer Spectroquant® Pharo and the Spectroquant® Colorimeter Picco Cl2/O3/ClO2/CyA/pH as well as an extended product line of instant visual test kits such as Merckoquant® test strips.

Visual test kits such as pH indicator strips and papers, Aquamerck®, Microquant®, and Aquaquant®, as well as testing instruments such as Reflectoquant® and Turbiquant® are also part of the range. The product range for microscopy is tailored to classical hematology, cytology, histology, and bacteriology. Laboratory supplies and third-party products round off the offerings to research, quality, analytical, and clinical labs.

Competence in BioMonitoring

BioMonitoring activities are another area of competence within the Lab Solutions Business Unit. Our products help to detect microbiological contamination and to conduct protein and cellular analysis targeting customers in the pharmaceutical, biopharmaceutical and food industries. The business unit also sells membranes, antibodies, and other diagnostic reagents to diagnostic and medical device manufacturers. Beverage companies also benefit from the use of BioMonitoring products to identify microbiological contamination from bacteria and yeast. We are also focused on developing next-generation technologies that are faster and more sensitive and enable drug manufacturers to identify contamination earlier in their processes. These products are capable of significantly reducing the time-to-result from days or weeks to hours.

Water purification equipment and products for laboratories

As the leading supplier of lab water applications, Merck Millipore also offers lab water instruments, consumables and services to meet diverse water purification needs. These products remove microorganisms, dissolved gases, particulates, and organic and inorganic compounds from water. The quality of the water is a critical variable for researchers as it can have a lasting impact on the scientific results of their research. The demands placed on water quality depend largely on the complexity of the scientific experiment, with ultrapure water required for complex experiments.

PROCESS SOLUTIONS

Consolidating resources

The Process Solutions Business Unit supplies products used to manufacture biopharmaceutical drugs. It accounts for about 40% of the division's total revenues. The business unit enables pharmaceutical and biotechnology companies to develop and manufacture clinical and commercial drug materials safely and efficiently. By combining the resources of Millipore and Merck, we can expand our portfolio of integrated bioprocessing technologies and offer an attractive range of development and regulatory services to biopharmaceutical manufacturers.

Biological safety

Products offered by the Process Solutions Business Unit support clarification, purification, viral clearance, sterile filtration, process monitoring and process development through scale-up to full-scale production. The portfolio helps ensure biological safety, for example with products for sterile and virus filtration as well as hardware and support for downstream processing. With a comprehensive range of products and services for purification, e.g. ultrafiltration and chromatography, Merck Millipore helps biopharmaceutical developers and manufacturers to efficiently and effectively purify biologic drugs. Some of the products within this portfolio include Pelicon® for tangential flow filtration, Millistak® Pod and Prostak™ for clarification, ChromaSorb™, and ProSep® chromatography media. The purification portfolio is complemented by Fractogel® and Eshmuno® from the Merck chromatography business.

Products and services support developers and manufacturers of biopharmaceuticals

Advanced separation technologies

The Mobius® single-use product line provides integrated solutions that bring together Merck Millipore's advanced separation technologies, differentiated single-use products, applications expertise, and expert validation support. Mobius® FlexReady Solutions are optimized, complete single-use solutions that integrate process-ready hardware systems with Mobius® Flexware assemblies.

As it eliminates the time-consuming steps involved in cleaning, autoclaving and assembling, the Mobius® CellReady 3L single-use, stirred tank bioreactor considerably reduces the downtime typical of glass bioreactors. This enables process development engineers to focus more on experimentation and data analysis in order to obtain results faster.

The business unit's portfolio covers the entire pharmaceutical production value chain

Pharmaceutical excipients

Moreover, the business unit's portfolio covers the entire pharmaceutical production value chain. Apart from regulated starting materials and active pharmaceutical ingredients, our pharmaceutical raw materials, for example from the Parreck® range, are used as excipients for the production of solid, semi-solid, and liquid formulations. Cell culture supplements complement the range of products and services for upstream processing. Merck has combined its range of excipients and active ingredients for pharmaceutical production processes under the Emprove® brand.

Ultrathin televisions: better
image quality, greater contrast
and less power consumption
thanks to PS-VA technology



PERFORMANCE MATERIALS

Liquid crystals from Merck are used around the world in LCD televisions, monitors, tablet PCs, notebooks, mobile phones, and digital cameras. Besides high-tech chemicals and materials for liquid crystal displays, the Performance Materials division also offers new lighting and display technologies such as OLEDs as well as innovative effect pigments for the plastics, printing and coatings industries. Our pigments are also used, for example, in skin care and color cosmetics. In view of climate change and high energy prices, we are also active in growth markets in the field of renewable energy sources. We are working to utilize solar energy more efficiently and to develop innovative technologies for energy-saving LEDs.

KEY PRODUCTS

- ICRISTAL® – Liquid crystal mixtures for displays
- IRIODIN® – Pearl luster pigments for a wide range of color effects

FURTHER PRODUCT GROUPS

- LIVILUX® – Materials for OLEDs (organic light-emitting diodes) in displays and for innovative lighting
- ISISHAPE® – Efficient, eco-friendly materials for structuring solar cells and touch screens
- Innovative effect pigments, such as XIRALLIC®, which creates glitter effects, for use in coatings, packaging and product design, imparting not only decorative but also security-relevant features, such as brand and anti-counterfeit protection

KEY DEVELOPMENTS IN 2010

- Growing demand for high-tech liquid crystals: total revenues up 38% compared to 2009
- Technology leader in innovative liquid crystal mixtures, for example PS-VA (polymer-stabilized vertical alignment) technology
- Total revenues of the Pigments business unit rise by 37% compared to the 2009 crisis year
- Production capacity utilization at a high level for both liquid crystals and pigments
- Operating result more than doubled to EUR 580 million from EUR 218 million
- New Material Research Center inaugurated at the Darmstadt site; at EUR 50 million it represents the largest single R&D investment in the Chemicals business sector to date

STRENGTH BOOSTED

Merck has combined its materials businesses and activities in the new Performance Materials division, which was created after completing the acquisition of the U.S. life science company Millipore on July 14. The division consists of the Liquid Crystals, Pigments and Cosmetics business units, as well as Advanced Technologies, which offers materials for LEDs (light-emitting diodes) and photovoltaics along with other innovative technologies.

Production capacity utilization was at a high level for both liquid crystals and pigments, reflecting the recovery from the downturn in 2009. Total revenues of the division rose by 38% to EUR 1,384 million from EUR 1,006 million in 2009. Positive currency effects of 9.7% and organic growth of 27% contributed to this increase. The division generated more than 70% of its total revenues with liquid crystals. At EUR 925 million (2009: EUR 478 million), gross margin grew faster than expenses. Thus, the division's operating result more than doubled, increasing to EUR 580 million from EUR 218 million in 2009. Return on sales (ROS) rose to 41.9% from 21.7% in 2009. Underlying free cash flow amounted to EUR 549 million, compared to EUR 304 million in 2009.

Performance Materials | Key figures

EUR million	2010	2009	Δ in %
Total revenues	1,384	1,006	38
Gross margin	925	478	93
R&D	127	109	17
Operating result	580	218	166
Exceptional items	-1	1	-
Free cash flow	542	288	88
Underlying free cash flow	549	304	81
ROS in %	41.9	21.7	

At EUR 50 million, the new Material Research Center in Darmstadt is the largest single R&D investment in the Chemicals business sector to date

In order to defend and expand our leadership position in display materials, among other fields, we continued to invest in research and development. R&D spending rose to EUR 127 million from EUR 109 million in 2009. In September, the new Material Research Center was opened at the Darmstadt site. At EUR 50 million, this represents the largest single R&D investment in the Chemicals business sector to date. Covering a surface area of approximately 11,000 square meters, it houses some areas of liquid crystal research as well as OLED (organic light-emitting diodes) research, among other activities. Our researchers at the center are also working on materials for mobile energy storage systems, for example for use in hybrid or electric vehicles.

LIQUID CRYSTALS

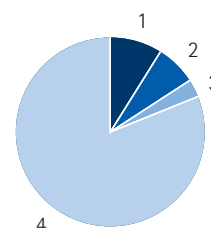
Upturn sustained

As a result of the growing demand for high-tech liquid crystals from Merck, total revenues increased in 2010 to EUR 1,013 million, which is 38% more than in 2009. The quarterly development of Liquid Crystals also reflects the rapid recovery of the global business for liquid crystal displays (LCD) after the crisis-related drop in 2009. Quarterly business performance continued to improve in 2010, with a 50% rise in revenues in the second quarter, reaching a record level of EUR 284 million. In the first half of 2010 alone, total revenues increased over the same period in 2009 by 63% to EUR 523 million. The operating result increased fourfold to EUR 263 million. Although still at a high level, total revenues were slightly lower in the third and fourth quarters. This was the result of the onset of inventory corrections in the LCD market, with display manufacturers reducing their production, as well as slightly unfavorable exchange rates.

Performance Materials | Sales by region

EUR million / % of divisional sales

1 Europe	127	9%
2 North America	99	7%
3 Latin America	33	3%
4 Asia, Africa, Australasia	1,118	81%



New technologies such as LED backlighting, 3D functionality and Internet connectivity are setting the trend in the television market

The market research firm DisplaySearch forecasts annual global shipments of over 268.8 million liquid crystal (LCD) televisions by 2014. The higher demand for LCD televisions is closely linked with new technologies such as LED backlighting, 3D functionality, and Internet connectivity.

Strong demand for liquid crystals based on PS-VA technology added crucial impetus to business

New display technologies continue to advance

The overall significant increase in total revenues in 2010 and the high capacity utilization of our LC production was largely due to the strong demand for liquid crystals based on the patented PS-VA (polymer-stabilized vertical alignment) technology, with which Merck further expanded its technology leadership. Besides improved moving picture quality, the technical advantages of PS-VA are faster switching times, higher contrast and better brightness with lower energy consumption.

PS-VA technology opens up new possibilities for LCD producers to achieve previously unattained screen properties – warmer, more natural colors, spatial depth and livelier movement. In Taiwan, South Korea and Japan, this technology is already being used in mass production. The term LED TVs is used to describe LCD televisions in which only the backlight consists of LEDs (light-emitting diodes), thus improving picture contrast, reducing energy consumption and producing more lifelike images. Individual areas of the illuminated surface for displaying a deep black can be separately dimmed or switched off completely, thus enhancing the contrast. This combines the advantages of LED and LCD. Further significant advantages include the low energy consumption and slim design of the flat screens.

Liquid crystals for 3D televisions and tablet PCs

In addition, Merck supplies innovative liquid crystal mixtures needed for devices such as 3D televisions and touch screens used in tablet PCs, which are becoming more and more popular. The liquid crystal mixtures used for special 3D glasses for watching 3D television contributed to the positive business performance, as did light-converting isiphor® phosphors used for LED backlighting.

In addition, we are working on reactive mesogens, which are polymerizable liquid crystals that can be used, for example, as material for optical films. They help to enhance the image quality and improve the power consumption of 2D and 3D screens.

New Liquid Crystals research center in South Korea

With the inauguration of the Advanced Technology Center in Poseung, South Korea, we have created additional possibilities to research and develop the latest liquid crystal technologies and have laid the foundations for further innovations. We invested EUR 11 million in this research center.

OLED technology is progressing rapidly

OLED technology for more energy-efficient light

Besides liquid crystal technology, our researchers are also working on materials for innovative displays. Here the special focus of development is on OLED materials, which are already being used in mobile phones and MP3 players. In our efforts to advance OLED technology, we are increasingly participating in research networks. The development of "new materials for OLEDs from solutions" (NEMO) is the focus of a project in which Merck is participating as the consortium leader together with partners from industry and science. The aim of this collaboration, which is funded by the German Federal Ministry of Education and Research, is to develop innovative, soluble materials for use in large-area OLED components for applications such as flat screens, electronic traffic signs or lighting systems.

OLEDs are solid-state devices composed of thin films of organic semiconductor molecules that create light when electrical current is applied. OLED tiles are produced on glass plates or flexible substrates and can emit white light that is more homogeneous and more energy-efficient than the light from conventional fluorescent lamps. The main difference to inorganic light-emitting diodes (LEDs) is their lower current density and laminar light density and the fact that no crystalline materials are required. They consume little energy and offer sharp images from nearly every viewing angle. By using ultra-thin luminescent layers, OLED technology makes it possible

to produce unique, large-area, homogeneous lighting surfaces with a total layer thickness of just a few millimeters.

Compared to the vacuum evaporation process used today, these new materials should significantly improve scalability, structurability and coating efficiency in particular. To this end, the NEMO project partners are focusing on soluble, phosphorescent materials for red, green and blue applications. In order to develop marketable solutions quickly, different injection, transport and electrode materials as well as adhesives are being researched, evaluated and tested for their performance in parallel. In addition, as the leading producer of high-performance OLED materials, Merck is collaborating with Braunschweig Technical University and the U.S.-based company Applied Materials on a project called "Light InLine" to develop processes to reduce the production costs of OLED lighting.

Photovoltaics – a key technology

Photovoltaics are one of the key technologies with respect to renewable energy sources. In this field, the Performance Materials division is focusing on the development of materials and printing technologies for solar cell production.

With the isishape® range, we already offer the producers of crystalline solar cells printable structuring materials that improve solar cell efficiency and enable eco-friendly production processes.

Flexible solar cells – new approaches
in material development

Our material platform Ilicon® offers customers organic semiconductors for printed, flexible and robust organic photovoltaic (OPV) cells. Developing materials further to increase solar cell efficiency is the key to reaching mass markets. To this end, Merck is collaborating with other leading industrial companies on a development project sponsored by the German Federal Ministry of Research and Education. This project aims to achieve fully printed, flexible solar cells with a minimum of 10% efficiency by 2012. At our Technical Centre in Chilworth, near Southampton, United Kingdom, we are focusing intensely on these goals.

In parallel, we are working with leading partners worldwide on new technologies, for example dye-sensitized solar cells. These imitate nature's photosynthesis process. The electrolytes in the dye-sensitized solar cells are increasingly based on the use of ionic liquids, in whose development and manufacture Merck has a globally leading role. The use of ionic liquids creates the possibility to produce both rigid and flexible solar cells with high efficiency and stability. This special feature will enable us to develop many new fields of application in the future.

Scientific alliances

Together with the University of Freiburg, we launched a project in November to develop and produce new battery materials. The Merck Battery Materials Lab, which is jointly run and operated with the university, is working to develop fundamentally new conductive salts for lithium-ion batteries to power hybrid and electric cars.

With such concept labs, Merck has been pursuing a new approach since 2006 aimed at building strong alliances with external and internal partners and an international research and technology network. These concept labs are an important element of the Advanced Technologies (AT) unit of the Performance Materials division. The goal of this unit is to develop innovative products through to market launch with the use of new promising technologies.

The concept labs are located at hot-spots of academic research around the world and focus internationally on strategic growth areas within the chemical industry. The systematic use of in-house expertise and the core competencies of Merck create the preconditions for generating new technologies and innovative products for Merck's Chemicals business. At the same time, external knowledge as well as in-licensing, cooperation and promotion possibilities are utilized. Merck concept labs are located in Darmstadt, Heidelberg, Atsugi (Japan), and Boston (United States).

Additionally, Merck is cooperating as part of a network of German companies and universities to develop concepts for the economical mass production of organic electronic circuits, storage devices and sensors, power generation through organic photovoltaics, as well as energy conservation through the use of more economical organic light-emitting diodes. To implement the project, the pacesetter partners have established a common platform, namely InnovationLab GmbH based in Heidelberg.

PIGMENTS / COSMETICS

Upswing also due to the marked increase in demand from the automotive industry

Recovery from the drop in demand

The Pigments business recovered well from the weak global demand in 2009. Total revenues of the Pigments business unit in 2010 amounted to EUR 325 million, which is 37% more than in the 2009 crisis year. Total revenues were especially high in the third quarter. This upswing was due to the marked increase in demand in the automotive industry, which returned to, or even exceeded, pre-crisis levels. With effect pigments for automotive coatings, Merck is an important supplier to the industry.

Demand for consumer goods revived following a long period of consumer restraint. This favorably impacted the business with pigments for plastics, print products and cosmetic products, as did the generally positive consumer sentiment. Positive currency effects provided an additional boost to the business unit.

We also continue to focus our innovation efforts on profitable pigments such as Candurin® pigments for coating foods and pharmaceuticals, and on the Pyrisma™ line of products, which covers a wide color range and offers intense effects.

Full capacity utilization

The generally strong order situation resulted in a return to full production capacity utilization in March 2010. We shifted some of our standard pigment production from Onahama in Japan to Gernsheim in Germany so that we could expand capacities for Xyrallic® pigment production at the Japanese site. The reason for this is the strong demand for these pigments containing aluminum oxide flakes – particularly from the automotive industry.

Additionally, in October we laid the cornerstone for the construction of a new plant to produce Meoxal™ at the Onahama site in Japan. Commercial production of Meoxal™, an effect pigment based on aluminum flakes coated with metal oxide, is scheduled to start in 2012. The pigment is distinguished by high color saturation, good hiding power and superior corrosion resistance. High demand is expected particularly from the automotive and cosmetics industries. By completing the integration of Suzhou Taizhu Technology Development, the leading supplier of effect pigments in China, we further expanded our position in the fast-growing Chinese market. The acquisition in 2009 gave us the possibility to more actively target the mid-range price segment with an expanded range of products.

New cosmetic applications

Portfolio of functional fillers for cosmetics significantly expanded

In 2010, Merck significantly expanded its portfolio in both cosmetic functional fillers and in the core pearl luster pigments business. With RonaCare® Cyclopeptide-5, Merck introduced the world's first cyclic peptide for the cosmetics industry. Thanks to its cyclic molecular design, the active ingredient displays high stability and high selectivity for its biological target site in the skin. The peptide is capable of reactivating the decelerated repair processes of mature skin and stimulating its natural regeneration. The appearance of lines and wrinkles is reduced after just brief use. The skin becomes significantly more supple, elastic and firm.

Scratch-resistant automotive coatings based on nanotechnology

The innovative additive Tivida™ has provided additional impetus. Based on nanotechnology, this product improves the scratch resistance of automotive coatings. The additive can be perfectly incorporated into the composition of the binding agent, thus changing its structure. The nanoparticles make the solvent-based coating system harder and at the same time more elastic due to the cross-linking of the polymer shell with the binding agent. Tivida™ provides the desired protection against scratches long after a fresh coating is applied, lasting throughout the subsequent use of the coated item. Tivida™ AS 1010, the first product in the brand family, makes it possible to protect high-gloss surfaces, for example the majority of clear coatings used in the automotive industry, against minor everyday scratches much longer than previously possible.

For plastics laser marking, Merck offers Micabs®C 431 and Micabs®C 411, two new additives in granulate form. They are free from heavy metals and thus approved for laser marking of food packaging as well as for toy production.

CORPORATE AND OTHER

The segment Corporate and Other comprises Group administrative costs, the financial result, taxes as well as certain exceptional items not allocated to individual divisions.

Segment significantly influenced
by the Millipore acquisition

Group administrative costs relate primarily to Merck KGaA and consist of typical holding company functions. These include, for example, the corporate finance and accounting, tax, procurement, communications and human resources departments to the extent that their services cannot be allocated to the divisions. Corporate costs also include expenses for central, non-allocated IT functions and corporate IT projects in connection with the expansion and harmonization of IT systems within the Merck Group.

The operating result of the segment Corporate and Other totaled EUR –90 million in 2010 compared to EUR –78 million in 2009. In connection with the legal risk of our former subsidiary Dey, Inc. having allegedly falsely reported certain price information, we incurred expenses of EUR 67 million, which were recognized as an exceptional item in the segment Corporate and Other. Although Dey Inc. was transferred to Mylan Inc., USA, within the scope of the sale of the Generics business in 2007, Merck remains liable to Mylan for the costs incurring from this legal dispute. Additional expenses of EUR 1 million relate to the sale of the Electronic Chemicals business in 2005 and include a purchase price reimbursement to the buyer for subsequent taxes. This expense is also disclosed as an exceptional item in the segment Corporate and Other. At EUR –252 million, the financial result for 2010 worsened mainly as a result of higher interest expenses in connection with the financing of the Millipore acquisition. Interest expenses increased by EUR 118 million from EUR –134 million in 2009.

At EUR 220 million, tax expenses consist of corporation and trade income taxes for the companies domiciled in Germany as well as comparable income taxes for companies domiciled abroad. This item contains not only effective taxes but also deferred taxes, which take into consideration the difference in the carrying values between the tax accounts of the Group companies and the consolidated balance sheet. The latter results primarily from purchase price allocations for Serono and Millipore.

Free cash flow was EUR –736 million in 2010, compared to EUR –511 million in 2009. In 2010, payments totalling EUR 241 million (2009: EUR 16 million) were made in connection with existing legal risks stemming from the sale of our former Generics subsidiary Dey Inc., USA. This includes the payment of EUR 215 million pursuant to the settlement with the U.S. Department of Justice. Further payments amounting to EUR 26 million relate to compensation payments as well as legal advisory fees in connection with this legal risk. Additionally, free cash flow reflects Group administrative costs as well as interest and tax payments.

Adjusted for the effects of the divestment of the Generics business, underlying free cash flow of the segment Corporate and Other amounted to EUR –496 million, thus remaining at the level of 2009.

Corporate and Other | Key figures

EUR million	2010	2009	Δ in %
Total revenues	–	–	–
Gross margin	–	–	–
R&D	–	–	–
Operating result	–90	–78	14
Exceptional items	–68	–	–
Free cash flow	–736	–511	44
Underlying free cash flow	–496	–496	–

RISK REPORT

Corporate risk management enables us to identify and manage risks. At present, we are not aware of any risks that could jeopardize the continued existence of the Merck Group.

RISK AND OPPORTUNITY MANAGEMENT

Every business decision is based on weighing the associated risks and opportunities. Merck is part of a complex, global business world and is therefore exposed to a multitude of external and internal risks. The aim of our risk management activities is to identify risks early on as well as to assess, manage, and deal with them. The basis for this is a Group-wide risk management process, which we use to systematically record the risks of the Merck Group and to present them in a transparent and comparable manner. Opportunity management in the Merck Group is conducted in the operating units on the basis of the corporate strategy. In this connection, we refer to the Report on Expected Developments starting on page 95.

Within the context of the Group-wide risk management process, the division heads, managing directors of Merck subsidiaries, and the heads of Group functions are specified as employees with responsibility for risks. Every six months, they report their active risk status and report to the risk manager their entire risk portfolio using a uniform, Group-wide reporting system. Risks are assessed based on their potential impact on EBIT and the likelihood of their occurrence. Furthermore, executives with responsibility for risks report existing and planned measures to avert risks and to minimize damage. The risk manager reviews the information and uses it to produce a risk report that reflects the current risk portfolio of the Group and the individual companies. All major aspects of the risk management process are described in a Group guideline. The Executive Board, Supervisory Board and Finance Committee receive the risk report every six months. Significant changes in the assessment of already known risks as well as new, significant risks are reported on an ad hoc basis.

INTERNAL CONTROL SYSTEM FOR THE CONSOLIDATED ACCOUNTING PROCESS

The objective of the internal control system for accounting is to implement controls that provide assurance that the financial statements are prepared in compliance with the relevant accounting laws and standards. It covers measures designed to ensure the complete, correct and timely transfer and presentation of information that is relevant for the preparation of the consolidated financial statements and the management report of the Merck Group. The control system is subject to continuous further development and is an integral component of the accounting and financial reporting processes in all relevant local units and Merck Group functions. With respect to the accounting process, the internal control system measures are intended to minimize the risk of material false statements in the consolidated accounting process of the Merck Group.

Key tools

The internal control system is geared to ensuring the accuracy of the consolidated accounting process and the preparation of compliant financial statements.

Group Accounting and Controlling centrally steers the preparation of the consolidated financial statements of Merck KGaA as the parent company of the Merck Group. This Group function defines the reporting requirements that the Merck subsidiaries must meet as a minimum requirement. At the same time, this function steers and monitors the scheduling and process-related requirements of the consolidated financial statements.

The Group-wide accounting guidelines form the basis for the preparation of the statutory financial statements of the parent company as well as the subsidiaries in Germany and abroad. These are available to all employees in the relevant units via the Merck intranet. The intranet is also used to adapt the guidelines to changes in the financial regulatory environment and update them in accordance with internal reporting requirements. One of the requirements of the Group-wide guidelines is to present Group-internal business processes as the basis for proper settlement of intercompany balances. Additional controls have been implemented in the consolidation process.

Group Accounting and Controlling also ensures the timely central management of changes to the equity holding structure and correspondingly adapts the Merck Group's scope of consolidation. The individual companies have a local internal control system. Where finance processes are covered via the Shared Service Center, the internal control system of the Shared Service Center is additionally applied. They ensure that accounting complies with IFRS accounting standards and with the Merck Group accounting guidelines.

Group Accounting and Controlling provides support to the local contacts throughout the entire reporting process. In case of important innovations in the reporting process and IT applications, the function trains employees involved and thus ensures a consistently high quality of reporting. The reporting process, either via the individual company or the Shared Service Center directly to Group Financial Reporting, ensures fast reporting cycles. The reported financial figures of the subsidiaries are validated via a three-step process between the local finance organization, divisional controlling and Group-wide controlling. Financial figures are checked for their plausibility and content by comparing them with the figures of the previous year and the budget. The accounting process is designed at all levels to ensure a clearly defined segregation of duties and assignment of responsibilities to the units involved in the accounting process at all times within the scope of continuous dual control.

For the assessment of balance sheet items, the Group Accounting and Controlling function closely cooperates with Merck Group Risk Management in order to correctly reflect potential balance sheet risks. For special issues, such as the evaluation of intangible assets and pension obligations, external experts are additionally involved where necessary.

For the Group accounting process, Merck globally uses a standard SAP software tool. Via a detailed authorization concept to limit user rights on a need-to-have basis, the system contains both single entity reporting and the consolidated financial statements. The financial data are transmitted in encrypted form. Routine system backups are performed in order to prevent a potential loss of data.

The local management of the individual companies is responsible for implementation. The effectiveness of Merck's internal control system with regard to accounting and the compliance of financial reporting is confirmed by the local managing director and the head of finance by signing the single entity reporting.

All of the structures and processes described are subject to constant review by Internal Auditing based on an annual audit plan specified by the Executive Board. The results of these audits are dealt with regularly in meetings of the Executive Board, the Supervisory Board and the Finance Committee.

The internal control system at Merck makes it possible to lower the risk of materially false accounting statements to a minimum. However, no internal control system – regardless of its design – can prevent a residual risk.

BUSINESS-RELATED RISKS

Merck has integrated its risk management system into the ongoing business planning processes. Potential negative developments, for example changes in customer demand or new political framework conditions, are described and evaluated in the risk report. We can, therefore, take countermeasures in good time if any events lead to deviations from the business plan. Risks in connection with investment decisions are minimized by the use of detailed guidelines.

Political and regulatory risks

As a global company, Merck faces political and regulatory changes in many countries and markets. In 2010, increasingly restrictive requirements were imposed in the pharmaceutical environment in terms of pricing, reimbursement and approval. We assume that further changes will follow in the future. These can negatively impact the profitability of our products and jeopardize the success of market launches and new approvals. Close communication with health and regulatory authorities is a preventive measure to avert risks. Together with monetary policy changes, the destabilization of political systems and possible erection of trade barriers can lead to declines in sales in certain countries and regions. Diversification in terms of products, industries and regions serves to mitigate potential negative effects.

Research and development risks

For Merck, innovation is a major element of the strategies of its Pharmaceuticals and Chemicals business sectors. Research and development projects can experience delays, expected budgets can be exceeded or targets remain unmet. Research and development are of special importance to the Pharmaceuticals business sector. Research and development projects are constantly monitored by a portfolio management system. In the course of portfolio management, we regularly evaluate and, if necessary, refocus research areas and all R&D pipeline projects. Sometimes development projects are discontinued after high levels of investment at a late phase of clinical development. Decisions – such as those relating to the transition to the next clinical phase – are taken with a view to minimizing risk. Furthermore, there is a risk that the regulatory authorities either do not grant approval or delay approval, which can have an impact on earnings. For instance, our oral multiple sclerosis treatment is currently in the final stage of the U.S. Food and Drug Administration's regulatory review process. In September 2010, the European regulatory authorities issued a negative opinion regarding our marketing

authorization application. Merck had appealed this decision. In January 2011, the European regulatory authorities issued a final negative opinion. Additionally, there is the danger that undesirable side effects of a pharmaceutical product could remain undetected until after approval or registration, which could result in a restriction of approval or withdrawal from the market.

Product quality and availability risks

Although Merck is exposed to product liability risks, these are minimized by means of quality controls along the entire value chain. This starts with the qualification of our suppliers. Comprehensive quality requirements for raw materials, purchased semifinished products and plants must be mentioned, as well as long-term strategic alliances in the case of supply- and price-critical precursor products. Overstocking and possible shelf-life risks associated with this are avoided by means of demand-driven production. This risk cannot be completely excluded because of production lead times, which are substantial in some cases. Total revenues and the operating result of the Merck Group depend on a large number of pharmaceutical and chemical products for various industries. This diversification lowers risk since the markets differ in their structure and economic cycles. This is also an expression of the Merck strategy to remain an integrated pharmaceutical and chemical company.

FINANCIAL RISKS

As a company that operates internationally and due to its presence in the capital market, Merck is exposed to various financial risks. These are primarily liquidity, default, currency and market-price risks, as well as risks of changing fair values of tangible and intangible assets, and fluctuations in the valuation of pension obligations.

Liquidity and financial risks

In order to ensure its continued existence, a company must be able to fulfill its commitments from operating and financial activities at all times. A central Group-wide liquidity management reduces potential liquidity risks. In addition, we have a EUR 2 billion syndicated multicurrency credit facility, which expires in 2014. This ensures Merck's continuing solvency in case there should be any liquidity bottlenecks in spite of the Group's positive operating cash flow. As our loan agreements do not contain any financial covenants, these agreed credit lines can be accessed even if Merck's credit rating should deteriorate. In 2009, Merck set up a debt issuance program that forms the contractual basis for the issue of bonds. In 2010, the volume of this program was doubled from EUR 5 billion to EUR 10 billion.

Default risks

Default risks arise in connection with financial investments, loans and financing commitments as well as receivables in operating business. As a result of the financial crisis, the default risks for receivables in the eurozone have increased to some extent. Merck has therefore reviewed all its positions in the respective countries and taken precautions for default risks to the necessary extent. Merck minimizes these risks by spreading its financial positions and the associated active management of its trading partners. Significant financial transactions involving credit risk are only entered into with banks that have a good credit rating and a minimum rating of A- from Standard & Poor's. In addition, Merck's large banking syndicate – the existing credit line of EUR 2 billion was syndicated by 17 banks – reduces possible losses in the event of default. Nevertheless, the default of individual trading partners cannot be fundamentally excluded, even if they have an excellent credit rating.

Currency and interest rate risks

Due to its international business operations in different currency and interest rate regions, Merck is inevitably exposed to currency and interest risks. Merck is affected by market price risks owing to its global group structure and the associated financial transactions, receivables in operating business, as well as expected future cash flows from sales and costs in foreign currency. We use derivative financial instruments to minimize currency risks and financing costs caused by exchange rate or interest rate fluctuations. Financial transactions, receivables and liabilities recognized in foreign currency are generally hedged. In certain cases, the company also hedges anticipated sales and future costs for a period of up to three years. More information can be found in Notes (40) to (42) of the Consolidated Financial Statements.

Market price and market value risks

The values of individual items in the balance sheet are exposed to the risk of changing market and business circumstances and thus also to changes in fair values. The need for write-downs could significantly impact profit and lead to changes in balance sheet ratios. This applies in particular to the high level of intangible assets including goodwill, which have become significantly more important to the Merck Group due to the acquisitions of Serono in 2007 and Millipore in 2010. Further details can be found in Note (23) to the Consolidated Financial Statements.

Risks in connection with pension obligations

Merck has commitments in connection with pension obligations. The present value of these obligations can be influenced by changes in the relevant valuation parameters, e.g. the interest rate, salary increase rate or death probabilities. Pension obligations are regularly evaluated based on external actuarial valuations prepared annually. The majority of these obligations is covered by the pension provisions disclosed in the balance sheet, while the smaller remainder is externally funded or covered by long-term monetary investments made for this purpose and

disclosed in the balance sheet. The latter amounted to EUR 217 million in 2010. As far as pension obligations are covered by plan assets consisting of interest-bearing securities, shares, real estate and other financial assets, decreasing or negative returns on these assets can adversely impact the value of the plan assets and thus require further additions to pension provisions. The risk of market fluctuations in the value of plan assets is reduced by a diversified investment strategy.

Assessments by independent rating agencies

The capital market makes use of the assessments published by rating agencies in order to assist lenders in evaluating the risks of a financial instrument. Merck is currently rated by the agencies Standard & Poor's and Moody's. In December 2010, Standard & Poor's gave Merck a long-term rating of BBB+, with a stable outlook. In December 2010, Moody's gave Merck a long-term rating of Baa2, with a stable outlook. Thus, both agencies confirm a stable investment grade rating for us.

LEGAL RISKS

Merck is exposed to litigation risks. These include in particular risks in the areas of product liability, competition and antitrust law, pharmaceutical law, patent law, tax law and environmental protection. As a research-based company, Merck has a valuable portfolio of industrial property rights, such as patents and trademarks. These property rights can become the target of attacks and infringements.

We are engaged in legal proceedings and government investigations, the outcome of which cannot currently be predicted. We also continue to bear the risks from certain proceedings against companies of the Generics group that we sold to Mylan in 2007. Thus Merck continues to be responsible for risks arising from cases concerning drug pricing in the United States. In addition, the Merck Serono division is involved in a licensing dispute in Israel as well as a dispute with a former sales partner in Italy. In the United States, our subsidiary EMD Serono is engaged in settlement negotiations with the U.S. Department of Justice and at the state level. The settlement negotiations concern a civil claim relating to sales of a product. In Germany, Merck is involved in antitrust proceedings concerning its exclusive distribution agreement with the laboratory wholesale distributor VWR International. Owing to a decision by the German Federal Antitrust Office, Merck is obliged to supply a number of products from its Laboratory business to other laboratory wholesale distributors in Germany. The company has taken all possible measures to protect its own legal position.

Generally, Merck strives to minimize and manage its legal risks. We have taken the necessary precautions to identify threats and defend our rights where necessary. Risks arising in connection with litigation are continually identified, assessed and communicated.

A compliance program applies to our employees worldwide, which enjoins them to comply with laws and guidelines, and provides them with the relevant training and support. The core of the program is the Merck Code of Conduct, which defines guidelines for ethical behavior. This is complemented by a training and testing program, a SpeakUp Line for reporting compliance violations, as well as a global network of compliance officers.

Insofar as possible and practical, the company limits liability and damage risks through insurance coverage, the type and scope of which is continually adjusted to current requirements.

HUMAN RESOURCES RISKS

Merck's success is significantly influenced by the competence and dedication of its employees. Due to intensive competition, it is increasingly difficult to recruit and retain qualified specialists, particularly in the pharmaceutical sector.

We are meeting this challenge by continuously enhancing our range of international personnel marketing measures. Merck addresses specialists and executives by means of a Talent & Succession Management process established throughout the Group. This process helps to identify internal talent for management positions and facilitates the objective assessment and development of talent, thus enabling positions to be quickly filled with suitable employees as a result of targeted selection via an internal talent pool. Vacancies arising over the short term are managed by means of clearly defined, appropriate deputizing arrangements. Key factors for employee retention and satisfaction are identified and evaluated by means of regular, corporate-wide employee surveys. We derive measures from the results of these surveys and monitor their efficacy in follow-up surveys. A performance management system applicable to the whole Merck Group was introduced to better measure employee contributions to the company's success. This is to facilitate a consistent evaluation of the degree to which personal goals are achieved and for measuring the degree to which the Merck Values are lived. On this basis, individual HR development measures are identified and implemented. This ensures the targeted preparation of employees for new business challenges and their motivation to solve these challenges for the benefit of the company. The Rewards Policy system complements this process by ensuring that performance-related payment components are handled consistently throughout the Group. The Merck Long-Term Incentive Plan offers eligible executives and experts a long-term, profit-related compensation component. More information can be found in Note (32).

INFORMATION TECHNOLOGY RISKS

Merck's strategic objectives cannot be achieved without IT support. The future focus and globalization of Merck will only succeed if consistent standards, systems and processes are in place. Reacting timely and flexibly to changing market developments, conducting innovative research, running production reliably, and supplying customers rapidly require reliable, high-performance IT.

Risks resulting from the complexity of internal and external requirements

IT risks with an impact on the business result occur when information is unavailable or erroneous, unintentionally disclosed or when the processes to be depicted have been implemented in IT systems in a way that is too inflexible, too complex or illegal. Security gaps that are recognized too late, or in the worst case not at all, and insufficient emergency planning measures can quickly become incidents that affect the entire company. IT systems that do not reflect the expectations of the businesses have the potential to massively hinder the economic development of companies. Undesired data protection violations owing to incorrect or absent authorizations create a negative external impression. The increasing dependency on IT as well as the growing interconnectivity of IT landscapes in international companies make it necessary for companies to invest heavily in maintenance, in the integration of new applications or even systems, and in the mapping of new processes. This development, in conjunction with constantly new national and international legal requirements, makes data processing a time-consuming and costly activity. As the complexity of the IT landscape increases, so do the potential risks.

Risks resulting from external threats

In addition, the general risk situation means more professional threats can be expected, with the trend moving away from general viruses and toward targeted industrial espionage and sabotage.

Significant potential IT risk scenarios for Merck include the failure of the central ERP (Enterprise Resource Planning) systems, the publication of classified confidential research and business development data, the manipulation of IT systems in chemical process control, as well as the revocation of drug registrations due to deficient validation of the relevant IT systems.

The IT infrastructure of Merck has been consolidated to improve service quality while simultaneously optimizing costs. Subsequent to the acquisition of Millipore, the Millipore IT systems were combined with the Merck IT systems within the scope of a controlled integration program.

Risk minimization strategy

Merck ensures the necessary availability of business-critical application systems and access to business-relevant data – even in the event that individual components fail – by means of redundant structures of technical components, networks and sites, as well as suitable, tested contingency measures. Security guidelines are in place for the entire Merck Group. They include appropriate organizational, technical and software-related precautions for access control, access rights, virus protection and data protection. The adherence to and efficacy of these measures are continuously monitored and reviewed by Internal Auditing as well as external auditors. A dedicated IT risk management process ensures that IT risks are evaluated and appropriate measures taken. Based on the measures taken, we assume that the likelihood of a serious IT risk occurring is low.

ENVIRONMENTAL AND SAFETY RISKS

Merck is a company with global production operations and is exposed to risks of possible damage to people, goods and its image. We minimize the risks to people and the environment by means of auditing, advising and training in matters of environmental protection as well as occupational health and safety. Merck systematically conducts audits both at its own locations as well as at suppliers and contract manufacturers. We constantly update these preventive measures and thus ensure the continuity of plant and equipment. By adhering to high technical standards and our rules of conduct, as well as by implementing all legal requirements in environmental protection and occupational health and safety, we ensure the preservation of our goods and our assets.

MANAGEMENT ASSESSMENT OF THE OVERALL RISK SITUATION

Currently no risks can be identified that could jeopardize the continued existence of the Merck Group. This is the finding of this risk report, which was prepared in accordance with German Accounting Standard 5.

REPORT ON EXPECTED DEVELOPMENTS

For 2011 and 2012, the Executive Board assumes that the sales and the operating result of the Merck Group will show growth. Overall, we expect business developments to be good, however we cannot rule out setbacks due to economic cycles in individual countries, also as a result of high national debt levels.

Deviations of actual business developments from previously reported forecasts

The deviations of actual business developments from the guidance given for 2010 are as follows, broken down by division and for the Group as a whole:

Deviations	Forecast 2010	adjusted actual values 2010*
Total revenues growth*		
Merck Group	3% – 7%	12%
Merck Serono	2% – 5%	8%
Consumer Health Care	5% – 10%	1%
Liquid Crystals*	5% – 10%	38%
Performance & Life Science Chemicals*	3% – 8%	17%
Operating result growth*		
Merck Group	20% – 30%	88%
Merck Serono	30% – 40%	59%
Consumer Health Care	–10% – 0%	–71%
Liquid Crystals*	15% – 25%	132%
Performance & Life Science Chemicals*	15% – 20%	111%

*The Chemicals divisions have been restated on a comparable basis. Excluding Millipore.

Owing to the acquisition of Millipore, a new segment structure was adopted for the Chemicals business sector in 2010. Therefore, the 2010 results are compared to the 2010 forecast based on the former segment structure. The acquired Millipore business was excluded from the actual values. All 2010 actual values for Liquid Crystals, Performance & Life Science Chemicals and the Merck Group have therefore been adjusted.

In an improving economic environment, Merck overall exceeded the guidance provided for 2010.

In the Annual Report for 2009, we forecasted for 2010 an increase in total Group revenues ranging between 3% and 7%. Total revenues increased by 12% to EUR 8,650 million. The operating result rose by 88% to a total of EUR 1,222 million. In our forecast, we predicted growth of between 20% and 30%.

For the Merck Serono division, we predicted an increase in total revenues of between 2% and 5%. In 2010, Merck Serono actually increased its total revenues by 8% to EUR 5,754 million. We had expected the operating result to increase by 30% to 40%, but instead it increased by 59%, rising to EUR 565 million. Better business developments as well as more favorable exchange rate developments contributed to this growth. On the cost side, we took steps to manage our marketing and selling as well as our research and development expenses more efficiently.

Sales of the Consumer Health Care division were expected to rise between 5% and 10%, but instead only grew by 1% to EUR 472 million. The operating result was forecast to grow between -10% and 0%. The actual operating result dropped by 71%, leading to EUR 14 million. The forecast was not achieved due to negative effects of business developments in China and Mexico as well as from impairments.

Sales in the former Liquid Crystals division were predicted to rise in the range between 5% and 10%, but they actually grew by 38% to EUR 1,013 million. The operating result was forecast to increase by between 15% and 25%, yet the division significantly exceeded that, rising 132% to EUR 527 million in 2010. This was due to the fact that business recovered far better than expected. Furthermore, new technologies, especially PS-VA, and favorable exchange rates also contributed to this increase.

Sales in the former Performance & Life Science Chemicals division were expected to grow between 3% and 8%. However, total revenues grew by 17% to EUR 1,411 million. The operating result increased 111% to EUR 205 million, which significantly exceeded the forecast of 15% to 20%. In this division, this was attributable likewise to positive business development and favorable currency effects.

Global economic developments

For 2011, the Organization for Economic Cooperation and Development (OECD) and the International Monetary Fund (IMF) assess differently the economic environment in which Merck operates. Merck orients toward the forecasts made by the OECD.

For the OECD's 34 member countries, the OECD expects a global increase in gross domestic product (GDP) of 2.3% in 2011 and 2.8% in 2012. For the United States, the OECD expects GDP to grow by 2.2% in 2011 and by 3.1% in 2012. It forecasts the GDP of the eurozone to grow by 1.7% in 2011 and by 2.0% in 2012. For Japan, the forecasts are somewhat lower. GDP is expected to increase by 1.7% in 2011 and by 1.3% in 2012.

The OECD expects an economic recovery, albeit one which will involve risks. For the near future and for a sustainable recovery from the crisis, the OECD calls for governments to immediately concern themselves with consolidating state finances in order to achieve more stability in the financial markets. Moreover, it is essential to end the different economic stimulus programs at the right time. The OECD expects that interest rates will not return to a normal level until the first half of 2012, as it predicts weak growth in the United States and the eurozone. In addition, the OECD is encouraging a shift in economic policy away from crisis management and toward crisis prevention.

The growth prospects for emerging countries such as Brazil, China and India are significantly better. Nevertheless, there is inflationary pressure in both Brazil and China, while India has to contend with its tax deficit.

The IMF predicts global GDP to increase by 4.4% in 2011, yet warns against excessively low consumer demand. The IMF forecasts a 2.5% increase in GDP for developed countries in 2011 (including a rise of 3.0% in the United States, 2.2% in Germany and 1.6% in Japan). For emerging and developing countries, GDP is predicted to increase in 2011 by 6.5%, including a rise of 9.6% in China, 8.4% in India and 4.5% in Russia. According to IMF data, global GDP is predicted to grow by 4.5% in 2012. The United States is expected to show GDP growth of 2.7% in 2012, which is slightly lower than in 2011, Germany growth of 2.0%, which is also slightly lower, and Japan growth of 1.8%, which is slightly higher than in 2011. At 4.4% and 9.5%, respectively, GDP growth in Russia and China is expected to maintain almost exactly the same level as in 2011. According to the data available, GDP growth of 8.0% is expected for India in 2012, which would be slightly less than in 2011.

The IMF sees risks for 2011 in the high levels of national debt, the volatility of the financial markets, the financing of banks and uncompleted reforms of the financial markets, as well as the weakness of real-estate markets in some countries. These countries additionally suffer from persistently high unemployment rates owing to slow growth in industrialized countries.

We assume that uncertainties in the overall economic development of certain countries are also to be expected in the future. Consequently, our forecasts have taken these uncertainties into account.

Forecast for the Merck Group

Our forecasts for Merck take into account the company's weighing up of risks and opportunities in accordance with our operational plans and medium-term assumptions. However, possible acquisitions, divestments and exceptional items are not included. The forecasts assume a moderate development of energy and raw material prices, as well as increasing personnel costs. Since we produce specialty chemicals, we are largely independent of oil price developments. Overall, we expect our businesses to see stable prices or market-oriented price increases. We only see ourselves exposed to significant price pressure in the Performance Materials division. We also see continued price pressure in the pharmaceutical sector, especially due to structural problems of health care systems.

The forecast development for total revenues of the entire Merck Group is presented in the following table:

Overall overview 2010 – 2011

EUR million	Total revenues	
	adjusted actual values 2010*	Forecast 2011
Merck Serono	5,754	5% – 10%
Consumer Health Care	472	7% – 12%
Merck Millipore*	1,613	51% – 56%
Performance Materials*	1,452	2% – 7%
Merck Group	9,291	13% – 18%

* The Chemicals divisions have been restated on a comparable basis.

As of 2011, the Cosmetics Actives business became part of the Performance Materials division. By contrast, in 2010 this was still part of the Merck Millipore division. The growth rates forecasted for these divisions in this report are therefore based on adjusted actual figures for 2010. Against the background of expected overall economic development and based on total revenues of EUR 9,291 million in 2010, the Executive Board assumes an increase in total revenues between 13% and 18% in 2011, and further growth for 2012. Furthermore, the Executive Board expects the Group operating result of EUR 1,113 million in 2010 to increase between 35% and 45% in 2011 and to increase as well in 2012. Profit after tax, irrespective of potential exceptional items, will likewise improve during this period.

Our debt has increased as a result of the Millipore acquisition. Merck had an equity ratio of 46.3% and net debt of EUR 4,484 million in 2010, and we expect the equity ratio to increase slightly at a high level. In the next few years, we plan to reduce debt by around EUR 2 billion. Based on the very high underlying free cash flow of EUR 1,670 million in 2010, we expect underlying free cash flow to remain at a high level in 2011 and 2012. Should payments for litigation be necessary, this would have a negative impact on underlying free cash flow. In the coming years, capital spending on property, plant and equipment will be lower than in 2010. Based on research and development spending of EUR 1,397 million in 2010, Merck will reach the 2010 research spending ratio of around 14% to 15% in 2011 and 2012. Merck has an extensive risk and opportunity management system, which is described in the Risk Report (see page 86 et seq). Relative to the forecast period of two years published in the Report on Expected Developments, we mainly see business-related opportunities and risks. Owing to Merck's diversification and broad product portfolio, a very different spectrum of important opportunities and risks results for each individual division. The relevant explanations are given for the respective divisions.

Forecast for the pharmaceutical sector in general

The market research institute IMS Health expects global sales of pharmaceuticals to increase in 2011 by between 5% and 7% to USD 880 billion. The United States remains the world's largest market and is, according to IMS Health, predicted to grow between 3% and 5% in 2011. In 2011, the Japanese market, the second largest in the world, will not be affected by the obligatory statutory price cuts that take place every two years. For this reason, we predict 5% to 7% growth in 2011. According to IMS Health, China, now the world's third largest pharmaceutical market, will grow between 25% and 27%, reaching a volume of around USD 50 billion. The five largest EU markets (Germany, France, Italy, Spain, and the United Kingdom) are expected to grow between 1% and 3%. Countries with emerging pharmaceutical markets, meaning those in which governments are increasing health spending or in which demand is rising, are predicted to achieve growth of between 15% and 17% to between USD 170 billion and USD 180 billion. IMS Health considers the "BRIC countries", i.e. Brazil, Russia, China, and India, to be among these 17 countries in total.

IMS Health expects the global pharmaceutical market to grow until 2014 by an annual average of between 5% and 8% , to between USD 1,130 billion and USD 1,160 billion in total. By 2014, the five largest markets in the EU are predicted to increase 1% to 4%, (to between USD 170 billion and USD 200 billion). Japan should grown between 2% and 5% (to between USD 100 billion and USD 130 billion) and the United States between 3% and 6% (to between USD 360 billion and USD 390 billion). The health care markets of the 17 emerging pharmaceutical markets are predicted to achieve growth of between 14% and 17% (to between USD 260 billion and USD 290 billion).

Seen by therapeutic area, IMS Health predicts growth of more than 10% by 2014 for products such as those to fight cancer and multiple sclerosis as well as to treat HIV and diabetes since many products for these therapeutic areas are expected on the market. For 2011 alone, market researchers expect launches of five new products with blockbuster potential (meaning products generating sales of more than USD 1 billion).

Forecast for the Merck Serono division

For the Merck Serono division, the Executive Board is expecting an increase in total revenues in 2011 ranging between 5% and 10%, relative to EUR 5,754 million in 2010, and predicts continued growth for 2012. Relative to EUR 565 million in 2010, we want to achieve significant growth in the operating result in 2011 and a further increase in 2012. The stronger increase as compared to total revenues can be attributed to a moderate cost increase, especially in marketing and sales. Furthermore, high write-downs and impairments impacted the operating result in 2010. As a regularly recurring expense, the result includes write-downs on intangible assets to their fair value as a result of the acquisition of Serono. Amortization is expected to amount to around EUR 600 million in both 2011 and 2012.

In the years to come, R&D spending will continue to be at the target level of 20% of total revenues of the Merck Serono division.

Cancer and multiple sclerosis are very important for Merck, as they are markets in which we offer patients therapeutic options. According to calculations made by Evaluate Pharma, a pharmaceutical service company, cancer therapies will continue to be the therapeutic area with the highest sales. In the global market for all pharmaceuticals, oncology treatments had a share of 7.9% in 2009, which is expected to rise to 8.8% by 2016, reaching sales of USD 70 billion. With sales of USD 10 billion, drugs to treat multiple sclerosis ranked number 14. Here, Evaluate Pharma forecasts an average annual increase of 3% to USD 12 billion up to 2016.

Biotech drugs accounted for 31% of the 100 best-selling pharmaceuticals in 2009. This share is expected to increase to 48% by 2016. This figure is of interest to Merck, as biotech drugs already account for 50% of our pharmaceuticals sold.

We see important opportunities and risks for the Merck Serono division closely linked to the successful launch of new products:

Consequently, the special focus of Merck Serono will be on the market launch of cladribine tablets. Cladribine was approved in Russia and Australia in 2010. For Europe, the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) issued a negative opinion regarding the marketing authorization application in September 2010.

We filed an appeal with the EMA against the decision for another review of the application. In January 2011, the CHMP confirmed its previous position and adopted a final negative opinion regarding the marketing authorization application for cladribine tablets. Our forecast has taken this into account. After resubmitting our application for approval of cladribine tablets with the U.S. Food and Drug Administration (FDA) in June 2010, the FDA granted the application Priority Review status. In November 2010, the FDA extended the review period by three months. A decision is expected at the end of February 2011. We will continue to focus our efforts on offering an oral, disease-modifying drug to treat relapsing-remitting multiple sclerosis.

Moreover, the existing business offers growth opportunities, particularly in markets such as Asia – especially China – Russia and Latin America, as well as in the further development of existing products (life cycle management), for example with new dosage forms.

Further risks in this division arise from the high levels of national debt in some countries and the resulting health care cost-containment measures, which can lead to lower sales.

Forecast for the Consumer Health Care division

With total revenues of EUR 472 million in 2010, the Executive Board forecasts an increase in total revenues in the Consumer Health Care division of between 7% and 12% in 2011 and a further increase in 2012. Based on an operating result of EUR 14 million in 2010, we want to achieve significant growth in the operating result in 2011. We expect a further increase in 2012. The expected improvement in the operating result is attributable to higher margins and to moderate cost increases. Due to the difficult business situation in China and Mexico, the division's sales did not meet our expectations for 2010. Besides these two effects, the operating result was also impacted by a warehouse fire in the United Kingdom as well as impairment losses.

For 2011, market researchers from the company Nicholas Hall are predicting key markets for OTC medicines to grow globally by 4.8%. This growth will be contingent on the markets' continued recovery and on the upswing that has followed the economic crisis. The experts provide the following breakdown for individual markets: they predict the strongest growth for Latin America (8.8%), followed by Asia-Pacific (7.9%). For Europe, they are expecting growth of 3.5%, but only 0.5% for Japan.

We see opportunities from a strengthening growth trend, based on the product portfolio focus on strategic brands. These brands are established in the premium price segment and are growing above-average relative to the global OTC market. In addition to dynamically growing markets in Latin America, our regional focus continues to be Europe. The Consumer Health Care division faces risks from changing health care policy framework conditions, which can negatively impact the business.

Forecast for the chemical industry in general

Compared to 2010, CEFIC (European Chemical Industry Council) expects a relatively moderate 2.5% increase in European chemical output for 2011. This is due to the prevailing uncertainties in the market regarding the development of the euro and U.S. monetary policy. The high demand for chemicals, particularly from the Asian region, is pushing up the prices of basic chemicals, which, according to CEFIC forecasts, will create a fear of destabilizing price peaks. In addition, many governments will be forced to adopt cost-cutting measures and to reduce or eliminate state spending in order to stimulate their economies.

The German Chemical Industry Association (VCI) forecasts that international production output will grow by 2.5% in 2011, with sales rising 4% to EUR 177.4 billion. This forecast expects 2010 output and capital expenditure to be 0.6% and 4.6% higher, respectively, than the peak levels of 2007, which was the best-performing year for the German chemical industry to date.

Forecast for the Merck Millipore division

With the acquisition of Millipore, we have created a successful business model for the life science industry, in which we will occupy a strong market position in the future as well.

For the Merck Millipore division, which generated total revenues of EUR 1,613* million in 2010, the Executive Board forecasts that total revenues will increase between 51% and 56% in 2011 and will increase again in 2012. Based on an operating result of EUR 48* million in 2010, this is expected to rise significantly in 2011 and to increase further in 2012.

The significant changes in total revenues and the operating result are also due to the fact that the newly acquired Millipore business was only consolidated for six months of 2010. Moreover, it must be noted that the inventories from the acquisition were already recognized at fair value and thus stepped up by EUR 86 million. This amount was fully expensed in cost of sales in the second half of 2010, and had a one-time negative impact on gross margin. As a recurring expense, the result includes the write-downs on intangible assets to their fair values resulting from the acquisition of Millipore. Amortization is expected to amount to around EUR 200 million for both 2011 and 2012. In addition, further integration costs are expected for 2011.

*Figure adjusted to reflect the new reporting structure

The new Bioscience Business Unit of Merck Millipore develops products that help scientists to better understand complex biological systems and to discover and develop new therapies. The extensive product portfolio of Merck Millipore is well positioned to grow in the dynamic bioscience market, parts of which will continue to face challenges. For this division we see risks particularly associated with the consolidation and restructuring of the pharmaceutical industry, but also with the expiration of patents and the development of new products. The Lab Solutions Business Unit supplies a broad portfolio of innovative, reliable high-quality products for general laboratory applications in a wide variety of industries. Growth is achieved by offering excellent products and direct sales. In addition, opportunities are arising in China, India as well as North and Latin America, where we want to grow with the market in coming years. For the new Process Solutions Business Unit, opportunities lie particularly in the strong sales growth and product portfolio of our customers and of our products for chromatography. The most significant risks are associated with the cost pressure in the biopharmaceutical industry and delivery by other suppliers. Overall, we aim to achieve significant growth in the result in an uncertain market environment by offering a broad product portfolio, aligning our business globally, leveraging regional strengths and identifying synergies.

Forecast for the Performance Materials division

In the Performance Materials division, Merck is estimating that the total revenues of EUR 1,452* million in 2010 will increase in 2011 by between 2% and 7% and will continue to rise in 2012. The operating result of EUR 576* million is predicted to remain unchanged in 2011 and to resume growth in 2012.

This division supplies specialty chemicals and materials for liquid crystal displays and for new lighting and display technologies such as OLEDs (organic light-emitting diodes), as well as effect pigments for the plastics, print and coatings industries. Merck pigments are also used in skincare and in color cosmetics. The division is also active in growth markets in the field of renewable energy.

*Figure adjusted to reflect the new reporting structure

DisplaySearch, a market research company for the display industry, predicts that the liquid crystal display market will continue to grow. The LCD market is being driven by the heavily increasing demand for TVs and notebooks in the emerging economies of Asia, as well as by devices such as tablet computers. According to the opinion of market researchers, the total surface area of liquid crystal displays should grow 8% per year on average between 2010 and 2017. This includes televisions, monitors and notebooks, among other products. For 2011, DisplaySearch is expecting the surface area of liquid crystal panels to increase by 11% relative to 2010. Flat panel production has so far been concentrated in South Korea and Taiwan, followed distantly by Japan. According to Display Search, however, China will have assumed third place by the end of 2012.

Since producers of automotive coatings are one of our customer sectors, the development of automotive sales figures is important to us. The U.S. market researchers from CSM Automotive predict that global automotive sales will grow in 2011 by 11%, rising to 61 million vehicles. This will put the automotive industry back at the level of 2008, but will still not as high as in 2007, which was a very good year. According to market researchers, the Indian market will show the strongest growth in 2011, followed by China, Brazil and South Korea. JD Power, a marketing information firm, is expecting production of 73 million cars in 2011, which would significantly exceed the 70.4 million vehicles sold in 2007, a record year. However, this growth is predicted to come only from emerging markets. The market research firm Polk is predicting a further increase in production, to 78 million cars in 2012.

Euromonitor, a key market research company for the cosmetics industry, predicts growth of 5.2% to USD 369 billion for the personal care and cosmetics sector in 2011 and further growth of 3.7% in 2012 relative to 2011. Performance Materials is also active in this market.

Additional opportunities for the Liquid Crystals Business Unit lie in the improved business performance of the display markets. For our PS-VA technology, we are expecting very satisfactory increases as a result of market growth. To maintain our leading technology position in liquid crystals, we will correspondingly intensify our R&D activities. Programs for increasing production efficiency will help keep the operating result at a high level. We face particular risks due to price pressure in the area of LC materials and due to the possible emergence of new competitors on the market. In view of Merck's so far dominant position, the emergence of competitors particularly in PS-VA technology could negatively impact sales and the operating result.

The Pigments and Cosmetics Business Unit has recovered significantly from the crisis year and will continue to grow in the coming years. The portfolio will continue to shift toward high-quality products. Opportunities and risks are especially linked with the growth of the automotive industry. This sector is showing a trend toward high-quality paints, an area in which Merck is extremely active. Other opportunities could arise from a shift in the automotive industry from the current trend of white-silver and black hues back to bright colors.

Forecast for the Corporate and Other segment

Corporate and Other comprises the costs for the Merck Group functions. This includes the costs of Corporate Auditing, of the Legal and Tax departments, of the Annual General Meeting, etc. Taxes for the Merck Group are also disclosed here as well as the financial result. Based on a figure of EUR -90 million for 2010, the operating result will remain unchanged in 2011. We forecast a further rise in costs for 2012.

Dividend development

For 2010, we are proposing to the Annual General Meeting the payment of a dividend of EUR 1.25 per share. Based on our earnings expectations, the family of owners and Merck shareholders can continue to expect to receive an earnings-oriented dividend.

Summary

For both 2011 and 2012, the Executive Board expects growth in both the total revenues and operating result of the Merck Group. The higher financial liabilities of the Merck Group, which resulted from the Millipore acquisition, will steadily decrease over the next several years, also as a result of our high free cash flow. This will continue to lead to solid balance sheet ratios. The actual results of the Merck Group and its divisions may deviate substantially from the expectations of predicted developments. This would be the case if one or other of the uncertainties mentioned were to occur, or if the planning assumptions were to prove inaccurate.

SUBSEQUENT EVENTS

In January 2011, the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) confirmed its previous position and adopted a final negative opinion regarding our marketing authorization application for cladribine tablets in Europe.

On February 7, 2011, all the conditions for the closing of the divestment of the Crop BioScience activities were fulfilled. At a selling price of EUR 208 million, the pre-tax gain on the sale is expected to be around EUR 160 million. As of December 31, 2010, the activities were recorded in the Group financial statements as assets and liabilities held for sale.