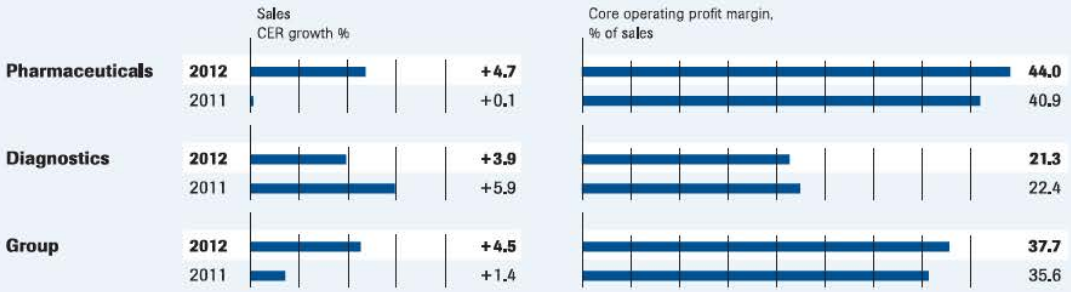
Roche

Finance Report

2012

Finance in brief

Key results



	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)	% of sales 2012	% of sales 2011
IFRS results						
Sales	45,499	42,531	+7	+4		
Operating profit	14,125	13,454	+5	+3	31.0	31.6
Net income	9,773	9,544	+2	+1	21.5	22.4
Net income attributable to Roche shareholders	9,539	9,343	+2	+1	21.0	22.0
Diluted EPS (CHF)	11.16	10.98	+2	+2		
Dividend per share (CHF) [1]	7.35	6.80	+8	+8		
Core results						
Research and development	8,475	8,073	+5	+2	18.6	19.0
Core operating profit	17,160	15,149	+13	+11	37.7	35.6
Core EPS (CHF)	13.62	12.30	+11	+10		
Free cash flow						
Operating free cash flow	15,389	13,733	+12	+10	33.8	32.3
Free cash flow	4,630	3,904	+19	+15	10.2	9.2

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
Net debt	(10,599)	(15,566)	–32	–31
Capitalisation	41,318	41,335	0	+3
– Debt	24,590	26,853	–8	–5
– Equity	16,728	14,482	+16	+19

1) Proposed by the Board of Directors.

CER (Constant Exchange Rates): The percentage changes at Constant Exchange Rates are calculated using simulations by reconsolidating both the 2012 and 2011 results at constant currencies (the average rates for the year ended 31 December 2011).

Core results and Core EPS (earnings per share): These exclude non-core items such as global restructuring charges and amortisation and impairment of goodwill and intangible assets. This allows a transparent assessment of both the actual results and the underlying performance of the business. A full income statement for the Group and the operating results of the divisions are shown on both an IFRS and core basis. The core concept is fully described on pages 146–149 and reconciliations between the IFRS and core results are given there.

Finance – 2012 in brief

Roche in 2012	**The Roche Group** reported strong overall results in a challenging market in 2012. Core operating profit grew ahead of sales, and Core Earnings per Share increased by 10% at constant exchange rates (CER). The Swiss franc was weaker at average rates against some major currencies, notably the US dollar and Japanese yen, which had a positive overall impact on the income statement and cash flows expressed in Swiss francs.
Sales	**Group sales** increased by 4% (CER) to 45.5 billion Swiss francs (+7% growth in Swiss franc terms). **Pharmaceuticals sales** growth was 5% (CER). The strong growth in both established and new oncology products, Actemra/RoActemra in rheumatoid arthritis and Pegasys in virology, was partially offset by the continuing impacts of generic competition and continuing pressures on prices, particularly in Japan and Western Europe. **Diagnostics sales** grew by 4% (CER), ahead of the market, with Professional Diagnostics and Tissue Diagnostics being the major contributors.
Operating results	**Core operating profit** increased by 11% (CER) to 17.2 billion Swiss francs (+13% growth in Swiss franc terms). The sales growth, productivity improvements and cost savings from various global restructuring plans offset the higher operating costs from investments in key markets as well as the impacts from price pressure and increased competition. The core operating margin increased by 2.1 percentage points to 37.7%. **Research and development** expenditure remained broadly stable with a slight increase of 2% (CER) to 8.5 billion Swiss francs on a core basis, due to strict portfolio prioritisation while supporting the development of the pipeline. R&D costs are 18.6% of Group sales. **IFRS operating results** include non-core items of 3.0 billion Swiss francs. This includes 1.3 billion for the restructuring of the Pharmaceuticals Division's Research and Development organisation and the restructuring of the Diagnostics Division's Applied Science and Diabetes Care businesses.
Non-operating results	**Net financial expenses** increased by 0.2 billion Swiss francs to 1.8 billion Swiss francs as lower interest expenses were more than offset by higher net foreign exchange losses and higher losses on debt redemptions.
Net income	**IFRS net income** increased by 1% at CER to 9.8 billion Swiss francs (+2% in Swiss franc terms), as the strong core operating results were offset by higher restructuring charges and a higher effective tax rate. **Core Earnings per Share** increased by 10% in constant currencies (+11% in Swiss francs).
Cash flows	**Operating free cash flow** of 15.4 billion Swiss francs, up 10% at CER due to higher operating profit. **Free cash flow** of 4.6 billion Swiss francs, up 15% at CER. **Repayment of debt** is ahead of schedule with 52% of the notes and bonds issued in 2009 to finance the Genentech transaction being repaid by the end of 2012.
Financial position	**Net working capital** increased by 3% (CER), reflecting higher levels of inventories due to launches and growth of key products, higher safety stock levels and increased demand in key markets. **Net debt** position improved by 5.0 billion Swiss francs to 10.6 billion Swiss francs. **Credit ratings** strong: Moody's at A1 and Standard & Poor's upgraded to AA.
Shareholder return	**Dividends** are proposed to increase by 8%. This will represent the 26th consecutive year of dividend growth and will result in a pay-out ratio of 54.0%, subject to AGM approval. **Total Shareholder Return (TSR)** was 20% representing a combined performance of share and non-voting equity security.

https://www.roche.com/dam/jcr:13c45df4-9cf6-4545-a23d-874d398aa788/en/fb12e.pdf

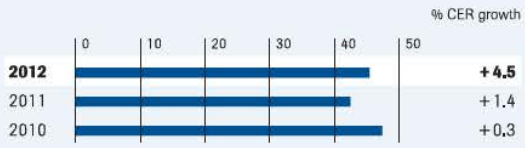
ROCHE GROUP

ROCHE HOLDING LTD, BASEL

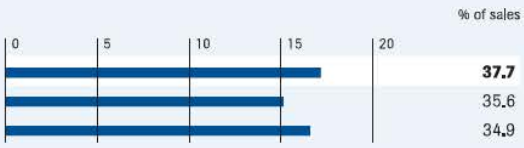
Financial Review

Roche Group results

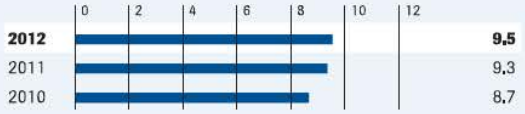
Sales in billions of CHF



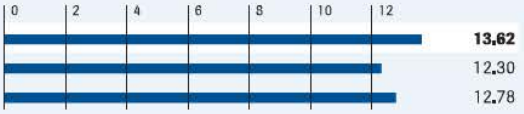
Core operating profit in billions of CHF



Net income attributable to Roche shareholders in billions of CHF



Core EPS in CHF



The Roche Group's results for 2012 reported growth in its core operating activities, with sales up by 4% and core operating profit up by 11% at constant exchange rates and core operating margin up by 2.1 percentage points to 37.7%. Sales volume increases, notably in the US and emerging markets such as China and Latin America, more than offset pricing pressures in many markets. The cost of sales ratio improved by 0.9 percentage points to 25.2% of sales, driven by continuing productivity improvements in the Pharmaceuticals Division. Operating costs were held at the necessary levels to support the future development of the business, notably for research and development which increased slightly by 2% due to portfolio prioritisation while supporting the development of the pipeline. This strong operating performance, partially offset by a higher tax rate, was responsible for an increase in Core EPS of 10% at constant exchange rates. Operating free cash flow grew at 10% to 15.4 billion Swiss francs or 33.8% of sales.

In the first half of 2012 the Group initiated a number of major restructuring initiatives to position the business for the future, notably in the Pharmaceuticals Division's Research and Development organisation with the announcement of the closure of the Nutley site in the US. In Diagnostics the division initiated global restructuring programmes in the Applied Science and Diabetes Care business areas to address long-term profitability by focusing on fewer businesses and products and by consolidating operations. Net income on an IFRS basis increased by 1% to 9.8 billion Swiss francs (+2% in Swiss francs) as the strong operating result was offset by the large restructuring costs in 2012.

Sales in the Pharmaceuticals Division rose by 5%, led by 9% growth in the oncology portfolio with sales of over 21 billion Swiss francs. The key growth drivers were Herceptin, MabThera/Rituxan, Avastin, Actemra/RoActemra, Zelboraf and Pegasys. The E7 key emerging markets showed growth of 14%, led by 27% sales growth in China. Diagnostics sales grew at 4%, expanding the division's leading market position. The major growth areas were Professional Diagnostics and Tissue Diagnostics, while sales in Diabetes Care and Applied Science both declined.

Core operating profit increased by 11%, with the Pharmaceuticals Division growing at 13% while the Diagnostics Division fell by 2%. Both divisions showed increases in marketing and distribution costs driven by investments in new products and key markets, notably in the US and China. There were also increased costs for factoring which contributed towards improved cash collections, especially in Southern Europe. Bad debt expenses decreased compared to 2011 on a Group level. The profitability in Pharmaceuticals increased by 3.1 percentage points to 44.0% due to the sales growth, a decrease in cost of sales from productivity improvements and portfolio prioritisation in research and development. In Diagnostics, profitability in 2012 declined by 1.1 percentage points to 21.3% mainly due to pricing pressures in the Diabetes Care business.

Operating free cash flow was 15.4 billion Swiss francs, an increase of 10% compared to 2011. This reflects the continued strong underlying cash generation of the Group's operations while making the necessary investments to develop the business. The increase in free cash flow was 15% to 4.6 billion Swiss francs.

In 2012 on average the Swiss franc was weaker compared to the average 2011 rates for some major currencies, notably the US dollar and Japanese yen. The overall impact is positive on the income statement and cash flows expressed in Swiss francs compared to the results at constant exchange rates.

Income statement

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	45,499	42,531	+7	+4
Royalties and other operating income	1,945	1,582	+23	+17
Cost of sales	(12,175)	(11,942)	+2	–1
Marketing and distribution	(8,539)	(8,049)	+6	+4
Research and development	(9,552)	(8,326)	+15	+11
General and administration	(3,053)	(2,342)	+30	+26
Operating profit	**14,125**	**13,454**	**+5**	**+3**
Associates	–	12	–100	–100
Financial income	471	647	–27	–30
Financing costs	(2,273)	(2,228)	+2	–2
Profit before taxes	**12,323**	**11,885**	**+4**	**+2**
Income taxes	(2,550)	(2,341)	+9	+5
Net income	**9,773**	**9,544**	**+2**	**+1**
Attributable to				
– Roche shareholders	9,539	9,343	+2	+1
– Non-controlling interests	234	201	+16	+10
Diluted EPS (CHF)	11.16	10.98	+2	+2
Core results				
Sales	45,499	42,531	+7	+4
Royalties and other operating income	1,945	1,582	+23	+17
Cost of sales	(11,444)	(11,117)	+3	0
Marketing and distribution	(8,392)	(7,967)	+5	+3
Research and development	(8,475)	(8,073)	+5	+2
General and administration	(1,973)	(1,807)	+9	+6
Operating profit	**17,160**	**15,149**	**+13**	**+11**
Associates	–	12	–100	–100
Financial income	471	647	–27	–30
Financing costs	(2,273)	(2,228)	+2	–2
Profit before taxes	**15,358**	**13,580**	**+13**	**+11**
Income taxes	(3,480)	(2,895)	+20	+16
Net income	**11,878**	**10,685**	**+11**	**+10**
Attributable to				
– Roche shareholders	11,643	10,470	+11	+10
– Non-controlling interests	235	215	+9	+3
Core EPS (CHF)	13.62	12.30	+11	+10

Sales

In 2012 sales increased by 4% at constant exchange rates (+7% in Swiss francs; +1% in US dollars) to 45.5 billion Swiss francs. Sales in the Pharmaceuticals Division rose 5% with Herceptin, MabThera/Rituxan, Avastin, Actemra/RoActemra, Zelboraf and Pegasys growing strongly. Avastin returned to growth with a 6% increase in sales. These positive results were partially offset by the continued decline in Bonviva/Boniva and CellCept sales from generic erosion following patent expiry and NeoRecormon/Epogin due to competition from biosimilars. In the E7 key emerging market sales in Pharmaceuticals grew by 14%, led by 27% growth in China. The Diagnostics Division sales were 10.3 billion Swiss francs, an increase of 4% at constant exchange rates, expanding its leading market position. The major growth area was Professional Diagnostics, which represents half of the division's sales and grew by 8%. Tissue Diagnostics (+12%) also showed strong growth, while Diabetes Care sales declined by 4% and Applied Science sales by 3%.

Divisional operating results for 2012

	Pharmaceuticals (mCHF)	Diagnostics (mCHF)	Corporate (mCHF)	Group (mCHF)
Sales	35,232	10,267	–	45,499
Core operating profit	15,488	2,187	(515)	17,160
– margin, % of sales	44.0	21.3	–	37.7
Operating profit	13,677	1,284	(836)	14,125
– margin, % of sales	38.8	12.5	–	31.0
Operating free cash flow	14,052	1,826	(489)	15,389
– margin, % of sales	39.9	17.8	–	33.8

Divisional operating results – Development of results compared to 2011

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales				
– % increase at CER	+5	+4	–	+4
Core operating profit				
– % increase at CER	+13	–2	+17	+11
– margin: percentage point increase	+3.4	–1.4	–	+2.2
Operating profit				
– % increase at CER	+10	–25	+81	+3
– margin: percentage point increase	+1.8	–4.7	–	–0.4
Operating free cash flow				
– % increase at CER	+7	+43	+11	+10
– margin: percentage point increase	+0.8	+4.9	–	+1.7

Core operating results

Pharmaceuticals Division. The division increased its core operating profit by 13% at constant exchange rates, driven by growth of the underlying business with a 5% increase in sales, an improved gross profit margin and contained spending. Core research and development costs remained broadly stable with a slight 2% increase, while there was only a 2% increase in marketing and distribution and a fall of 3% in general and administration.

Diagnostics Division. Core operating profit was down 2%, with the 4% sales increase more than offset by pricing pressures in the Diabetes Care business. Cost of sales increased at a higher rate than sales growth due to pricing impacts and increased placement costs following the expansion of the worldwide installed instrument base. Research and development and marketing and distribution costs were kept in line with sales growth. There was significant growth in general and administration costs with a base effect due to the release of a provision in 2011. As described below, the division has initiated global restructuring plans to address the long-term profitability of the Applied Science and Diabetes Care business areas.

Global restructuring plans

In the first half of 2012 the Group initiated several major global restructuring plans, notably for the reorganisation of research and development in the Pharmaceuticals Division and to address long-term profitability in the Applied Science and Diabetes Care business areas.

Global restructuring plans: costs incurred in millions of CHF

	Pharma R&D [1]	Diagnostics [2]	Pharma Informatics	Other plans [3]	Total
2012					
Global restructuring costs					
– Employee-related costs	188	91	46	161	486
– Site closure costs	381	63	–	125	569
– Other reorganisation expenses	27	26	3	325	381
Total global restructuring costs	**596**	**180**	**49**	**611**	**1,436**
Additional costs					
– Impairment of goodwill	–	187	–	–	187
– Impairment of intangible assets	46	29	–	112	187
– Legal and environmental costs	243	–	–	1	244
Total costs	**885**	**396**	**49**	**724**	**2,054**

1) Includes closure of the Nutley site and associated infrastructure and environmental remediation costs.
2) Includes restructuring of the Applied Science and Diabetes Care business areas.
3) Includes Operational Excellence (Pharmaceuticals and Diagnostics) and dalcetrapib (Pharmaceuticals).

Pharmaceuticals Division – Research and Development reorganisation. On 26 June 2012 the Group announced a streamlining of the research and development activities within the Pharmaceuticals Division. As part of this plan the US site in Nutley, New Jersey, will be closed by the end of 2013, with a reduction in the workforce of approximately 1,000 people. The research and development activities currently undertaken at Nutley will be consolidated at existing sites in Switzerland and Germany and at the planned Translational Clinical Research Centre at the Alexandria Centre for Life Science in Manhattan in the US. The resulting savings from the global site consolidation and related infrastructure costs, the bundling of support functions as well as shifts in the portfolio will allow the reallocation of resources to the growing number of clinical programmes. During 2012 costs of 885 million Swiss francs were incurred, based on latest estimates of the cost of the reorganisation. Of this amount, 188 million Swiss francs were provisions for severance payments and other employee-related costs, net of estimated pension curtailment gains. A charge of 381 million Swiss francs was recorded for impairments of property, plant and equipment at the Nutley site. In addition to these restructuring costs, environmental remediation costs of 243 million Swiss francs were booked based on the initial estimates of the additional remediation activities that may be needed before the Nutley site can be sold. Impairment charges to intangible assets of 46 million Swiss francs were recorded as a result of portfolio prioritisation decisions linked to this reorganisation.

Diagnostics Division – Applied Science and Diabetes Care restructuring. Initiatives were announced in 2012 for the Applied Science and Diabetes Care businesses, which include streamlining the product portfolio, consolidating research and development activities and increasing the efficiency of marketing and distribution operations. Costs of 180 million Swiss francs were incurred in 2012, which relate to employee termination and site closure costs. In addition goodwill impairment charges of 187 million Swiss francs were incurred for the full write-off of the goodwill from the 2007 NimbleGen acquisition, resulting from the decision to exit the Microarray business as part of the reorganisation of the Applied Science business area, as well as 29 million Swiss francs from the impairment of intangible assets in this business area.

Pharmaceuticals Division – Global Informatics reorganisation. Costs of 49 million Swiss francs were incurred, which mainly consist of severance payments and other employee-related costs.

Other global restructuring plans. In 2012 costs of 484 million Swiss francs were incurred for the previously announced Operational Excellence programme, mainly for employee-related costs for sales force restructuring initiatives in the Pharmaceuticals Division and employee-related and site closure costs in the Diagnostics Division for the sites in Burgdorf, Switzerland and Graz, Austria. In the second quarter of 2012 the Pharmaceuticals Division initiated a detailed review following the announcement of the results of the second interim analysis of the dalcetrapib dal-OUTCOMES Phase III trial and the subsequent termination of the dal-OUTCOMES trial and all the studies in the dal-HEART programme. Consequently restructuring costs of 128 million Swiss francs were incurred, which consisted of the remaining trial costs and write-offs of inventories and property, plant and equipment. Additionally 112 million Swiss francs were expensed for the write-off of previously acquired intangible assets.

Impairment of goodwill and intangible assets

Impairment charges for goodwill and intangible assets were 187 million Swiss francs and 525 million Swiss francs, respectively, approximately half of which was incurred for the various global restructuring initiatives as described above. In addition, unrelated to global restructuring plans, further impairment charges of 338 million Swiss francs were recorded. The major elements of this amount are charges of 103 million Swiss francs following from a portfolio prioritisation decision by the Pharmaceuticals Division, which relates to a decision to return the global rights to the monoclonal antibody RG 7334 anti-PLGF MAb to the alliance partners, and charges of 162 million Swiss francs follow from the latest clinical data assessment of a project acquired as part of the Marcadia acquisition.

Legal and environmental settlements

In addition to the environmental remediation costs of 243 million Swiss francs for the Nutley site mentioned above, a further 146 million Swiss francs of legal and environmental costs were recorded, unrelated to global restructuring plans. These include the estimated additional remediation costs of a landfill site near Grenzach, Germany, that was previously used by manufacturing operations that were closed some years ago.

Treasury and taxation

Financial income was 0.5 billion Swiss francs, a decrease of 30% mainly due to foreign currency losses whereas in 2011 devaluation-related foreign exchange gains occurred in Venezuela. Financing costs were 2.3 billion Swiss francs, a decrease of 2%, with interest costs being 8% lower at constant exchange rates as debt was repaid. Core tax expenses increased by 16% to 3.5 billion Swiss francs and the Group's effective core tax rate increased to 22.7% compared to 21.3% in 2011. This was mainly as a consequence of the higher percentage of core profit contribution coming from the US, which has a relatively higher local tax rate than the average Group rate.

Net income and Earnings per share

IFRS net income increased by 2% and diluted EPS by 2% with the strong core operating performance offset by costs of the various global restructuring plans. On a core basis, which excludes non-core items such as global restructuring costs and amortisation and impairment of goodwill and intangible assets, net income and Core EPS were 10% higher, driven by the strong operating performance partially offset by the higher effective tax rate.

Supplementary net income and EPS information is given on pages 146–149. This includes calculations of Core EPS and reconciles the Core results to the Group's published IFRS results.

Financial position

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals				
Net working capital	5,548	5,445	+2	+7
Long-term net operating assets	12,955	14,563	–11	–8
Diagnostics				
Net working capital	3,347	3,501	–4	–3
Long-term net operating assets	11,382	12,022	–5	–4
Corporate				
Net working capital	(71)	(42)	+69	+70
Long-term net operating assets	(309)	2	–	–
Net operating assets	**32,852**	**35,491**	**–7**	**–5**
Net debt	(10,599)	(15,566)	–32	–31
Pensions	(6,585)	(4,952)	+33	+35
Income taxes	1,591	174	Over +500	Over +500
Other non-operating assets, net	(531)	(665)	–20	–19
Total net assets	**16,728**	**14,482**	**+16**	**+19**

Compared to the start of 2012 the Swiss franc strengthened against some major currencies by the year-end, most importantly against the US dollar and the Japanese yen. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc was stable against the euro during 2012.

In the Pharmaceuticals Division net working capital increased by 7% at constant exchange rates. Inventories increased by 18% mainly due to inventory building to support both recent and upcoming product launches, to ensure supply for increased sales demand and to meet business expansion in emerging markets. Receivables increased by 3%, with the impacts of continued sales growth in US and emerging markets being partly offset by strong collection of outstanding receivables, notably in Southern Europe. Payables were 8% higher than the previous year due to increased accrued liabilities for sales related chargebacks, employee incentives and accrued royalties. Long-term net operating assets decreased by 8% mainly due to the impact of global restructuring plans and lower intangible assets. In Diagnostics the net working capital decreased by 3%. The main driver was a decrease in receivables after strong collections and factoring initiatives in Southern European countries, which more than offset higher inventory levels due to product launches and higher safety stocks due to increasing market demand in China and a decrease in payables. The long-term net operating assets decreased by 4% as intangible assets decreased and additional provisions for restructuring costs were created.

The decrease in the net debt position was mainly due to the free cash flow of 4.6 billion Swiss francs. The net pension liabilities increased by 1.6 billion Swiss francs due to continuing low interest rates increasing the discounted defined benefit obligation. The net tax assets increased mainly due to the deferred tax effect of this increase in net pension liabilities. Other non-operating net assets decreased by 19% due to a decrease in interest payables.

Free cash flow

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals	14,052	12,914	+9	+7
Diagnostics	1,826	1,259	+45	+43
Corporate	(489)	(440)	+11	+11
Operating free cash flow	**15,389**	**13,733**	**+12**	**+10**
Treasury activities	(1,542)	(1,493)	+3	–2
Taxes paid	(3,329)	(2,594)	+28	+25
Dividends paid	(5,888)	(5,742)	+3	+2
Free cash flow	**4,630**	**3,904**	**+19**	**+15**

The Group's operating free cash flow for 2012 was 15.4 billion Swiss francs, with the 11% increase in core operating profit at constant exchange rates feeding through to a 10% increase in operating free cash flow. Cash generation in the Pharmaceuticals Division increased by 7% to 14.1 billion Swiss francs as the strong operating results were partially offset by increases in net working capital from the increased inventory holdings for recently launched products and additional capital expenditure for property plant and equipment. Diagnostics operating free cash flow increased due to improved collection of trade receivables and factoring initiatives in Southern European countries. The free cash flow in 2012 shows an increase of 0.7 billion Swiss francs to 4.6 billion Swiss francs. This was primarily due to the 1.7 billion Swiss francs increase in operating free cash flow which was partially offset by higher tax payments and an increase in the annual dividend.

Pharmaceuticals Division operating results

Pharmaceuticals Division operating results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	35,232	32,794	+7	+5
Royalties and other operating income	1,794	1,453	+23	+18
Cost of sales	(7,348)	(7,436)	–1	–5
Marketing and distribution	(5,914)	(5,636)	+5	+2
Research and development	(8,529)	(7,397)	+15	+12
General and administration	(1,558)	(1,527)	+2	–2
Operating profit	**13,677**	**12,251**	**+12**	**+10**
– margin, % of sales	38.8	37.4	+1.4	+1.8
Core results [1]				
Sales	35,232	32,794	+7	+5
Royalties and other operating income	1,794	1,453	+23	+18
Cost of sales	(7,097)	(7,053)	+1	–3
Marketing and distribution	(5,851)	(5,564)	+5	+2
Research and development	(7,529)	(7,173)	+5	+2
General and administration	(1,061)	(1,051)	+1	–3
Core operating profit	**15,488**	**13,406**	**+16**	**+13**
– margin, % of sales	44.0	40.9	+3.1	+3.4
Financial position				
Net working capital	5,548	5,445	+2	+7
Long-term net operating assets	12,955	14,563	–11	–8
Net operating assets	**18,503**	**20,008**	**–8**	**–4**
Free cash flow				
Operating free cash flow	14,052	12,914	+9	+7
– margin, % of sales	39.9	39.4	+0.5	+0.8

1) See pages 146–149 for definition of Core results and Core EPS.

Sales overview

Pharmaceuticals Division – Sales by therapeutic area

Therapeutic area	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Oncology	21,341	19,210	+9	61	59
Virology	3,121	2,663	+14	9	8
Inflammation/Autoimmune/Transplantation	3,043	2,816	+5	9	9
Metabolism/Bone	1,611	2,015	–23	5	6
Ophthalmology	1,481	1,523	–8	4	5
Respiratory diseases	1,242	1,095	+9	3	3
Cardiovascular diseases	992	901	+6	3	3
Renal anemia	880	1,018	–16	2	3
Central nervous system	858	851	+1	2	2
Infectious diseases	358	355	–1	1	1
Other therapeutic areas	305	347	–14	1	1
Total sales	**35,232**	**32,794**	**+5**	**100**	**100**

Pharmaceuticals Division sales increased by 5% at constant exchange rates mainly due to the continuing strength of the oncology portfolio, which grew 9%. The division benefited from strong growth in the US (+7%), China (+27%) and Brazil (+11%). The growth in most key products offset the negative impacts from pricing pressures as well as expected decreases in sales of some medicines due to loss of patent exclusivity and competition. Sales growth was primarily driven by six products: Herceptin, MabThera/Rituxan, Avastin, Actemra/RoActemra, Zelboraf and Pegasys. These products represent 60% of the portfolio (2011: 57%) and together generated 2.4 billion Swiss francs of additional sales in 2012. This growth was partly offset by lower sales of Bonviva/Boniva, NeoRecormon/Epogin, Lucentis and CellCept. Tamiflu sales increased mainly due to the strong influenza season in the US.

Oncology continued to account for the majority of the division's sales, with continued growth in Herceptin and MabThera/Rituxan and a return to growth for Avastin. The recently launched Zelboraf was also a significant growth contributor. Virology sales grew, benefiting from the continued growth of Pegasys, and higher Tamiflu sales in the US and Japan. Sales in inflammation/autoimmune/transplantation increased due to the continuing strong uptake of Actemra/RoActemra and growth of MabThera/Rituxan in rheumatoid arthritis more than compensating for the negative impact of continued generic erosion of CellCept.

Product sales

Pharmaceuticals Division – Sales

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Oncology					
Herceptin	5,889	5,253	+11	17	16
Avastin	5,764	5,292	+6	16	16
MabThera/Rituxan [1]	5,622	5,027	+9	16	15
Xeloda	1,523	1,354	+9	4	4
Tarceva	1,314	1,251	+2	4	4
Neutrogin	266	278	–9	1	1
Zelboraf	234	31	Over +500	1	0
NeoRecormon/Epogin [2]	178	222	–17	1	1
Others	551	502	+8	1	2
Total Oncology	**21,341**	**19,210**	**+9**	**61**	**59**
Virology					
Pegasys	1,649	1,438	+12	5	4
Valcyte/Cymevene	638	569	+9	2	2
Tamiflu	560	359	+48	1	1
Others	274	297	–8	1	1
Total Virology	**3,121**	**2,663**	**+14**	**9**	**8**
Inflammation/Autoimmune/Transplantation					
MabThera/Rituxan [1]	1,085	978	+8	3	3
CellCept	909	991	–11	3	3
Actemra/RoActemra	842	618	+33	2	2
Others	207	229	–13	1	1
Total Inflammation/Autoimmune/ Transplantation	**3,043**	**2,816**	**+5**	**9**	**9**
Metabolism/Bone					
Bonviva/Boniva	323	696	–54	1	2
Nutropin	304	317	–9	1	1
Evista	189	206	–13	1	1
Xenical	168	238	–30	0	1
Others	627	558	+7	2	1
Total Metabolism/Bone	**1,611**	**2,015**	**–23**	**5**	**6**
Ophthalmology					
Lucentis	1,481	1,523	–8	4	5
Total Ophthalmology	**1,481**	**1,523**	**–8**	**4**	**5**
Respiratory diseases					
Xolair	705	603	+11	2	2
Pulmozyme	537	492	+6	1	1
Total Respiratory diseases	**1,242**	**1,095**	**+9**	**3**	**3**

Pharmaceuticals Division – Sales *(continued)*

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Cardiovascular diseases					
Activase/TNKase	584	453	+22	2	2
Others	408	448	–11	1	1
Total Cardiovascular diseases	**992**	**901**	**+6**	**3**	**3**
Renal anemia					
NeoRecormon/Epogin [2]	496	674	–28	1	2
Mircera	384	344	+8	1	1
Total Renal anemia	**880**	**1,018**	**–16**	**2**	**3**
Central nervous system					
Madopar	310	294	+6	1	1
Others	548	557	–2	1	1
Total Central nervous system	**858**	**851**	**+1**	**2**	**2**
Infectious diseases					
Rocephin	266	265	–2	1	1
Others	92	90	+2	0	0
Total Infectious diseases	**358**	**355**	**–1**	**1**	**1**
Other therapeutic areas	**305**	**347**	**–14**	**1**	**1**
Total sales	**35,232**	**32,794**	**+5**	**100**	**100**

1) Total MabThera/Rituxan sales of 6,707 million Swiss francs (2011: 6,005 million Swiss francs) split between oncology and Inflammation/Autoimmune/Transplantation franchises.
2) Total NeoRecormon/Epogin sales of 674 million Swiss francs (2011: 896 million Swiss francs) split between renal anemia and oncology franchises.

MabThera/Rituxan

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	3,112	2,722	+8	46	46
Western Europe	1,643	1,574	+6	24	26
Japan	291	254	+8	4	4
International	1,661	1,455	+13	26	24
Total sales	**6,707**	**6,005**	**+9**	**100**	**100**

MabThera/Rituxan. For non-Hodgkin's lymphoma (NHL), chronic lymphocytic leukemia (CLL) and rheumatoid arthritis (RA). The sales growth in the oncology segment of 9% was driven by the strong uptake of the first-line maintenance treatment of follicular lymphoma (a type of NHL) as well as first-line and relapsed/refractory CLL in the US and Western Europe. Sales in the US were 3.1 billion Swiss francs, an increase of 8%, while sales in Western Europe rose by 6%. Sales growth of 13% in the International region, including key emerging markets such as Russia and China, was also mainly due to uptake in NHL indications and increased treatment share. Sales grew despite mandatory price cuts in some markets. Sales in the RA franchise were 1.1 billion Swiss francs in 2012, an increase of 8% in constant currencies, with continued positive impact from increased use in patients with an inadequate response to treatment with tumour necrosis factor inhibitors.

Herceptin

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	1,663	1,422	+11	28	27
Western Europe	1,970	1,941	+3	33	37
Japan	337	288	+11	6	5
International	1,919	1,602	+20	33	31
Total sales	**5,889**	**5,253**	**+11**	**100**	**100**

Herceptin. For HER2-positive breast cancer and HER2-positive metastatic (advanced) stomach cancer. Sales grew in all regions, particularly in the International region where sales grew by 20% to 1.9 billion Swiss francs. Demand was especially strong in the CEMAI (Central and Eastern Europe, Middle East, Africa, Central Asia, Indian Subcontinent) and Latin America regions. US sales were 1.7 billion Swiss francs, an increase of 11% largely due to continued uptake for stomach cancer and an increased availability of patients resulting from the closure of large trials in HER2 positive breast cancer. Some positive impact from on-going efforts to improve the quality of HER2 testing is believed to have contributed to performance as well. HER2 testing was also a key growth driver in Western Europe, where Herceptin is the Group's leading product with sales of 2 billion Swiss francs, an increase of 3%. Global growth was also due to programmes to help improve access in emerging markets. Japanese sales were driven by continued uptake in the stomach cancer indication.

Avastin

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	2,475	2,343	0	43	44
Western Europe	1,510	1,448	+6	26	27
Japan	769	627	+16	13	12
International	1,010	874	+16	18	17
Total sales	**5,764**	**5,292**	**+6**	**100**	**100**

Avastin. For advanced colorectal, breast, lung, kidney and ovarian cancer, and for relapsed glioblastoma (a type of brain tumour). Global sales grew by 6%, mainly due to increased use in established indications (colorectal, lung and breast cancer) as well as the successful launch in newly diagnosed advanced ovarian cancer in Western Europe. Avastin received two new EU approvals in the fourth quarter of 2012: for treatment of recurrent ovarian cancer in combination with standard chemotherapy and for colorectal cancer treatment, continuing first-line Avastin beyond progression, in combination with second-line chemotherapy. Overall Avastin sales in the United States were 2.5 billion Swiss francs and in the International region growth was 16%, led by the CEMAI, Latin America and Asia–Pacific sub regions. Growth in Japan was 16% due to the use in breast cancer, colorectal cancer and lung cancer and growth was 6% in Western Europe due to use in ovarian cancer.

Pegasys

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	541	343	+49	33	24
Western Europe	301	297	+3	18	21
Japan	81	93	–17	5	6
International	726	705	+2	44	49
Total sales	**1,649**	**1,438**	**+12**	**100**	**100**

Pegasys. For hepatitis B and C. Sales increased by 12% to 1.6 billion Swiss francs mainly due to the continued demand for Pegasys in triple-combination therapy with direct-acting hepatitis C antivirals and ribavirin. In the US sales grew by 49% and in Western Europe by 3%, although sales growth slowed in the second half of the year following an initial surge. As the leading pegylated interferon, Pegasys has established itself as a key component of the triple-combination treatment regimen, further expanding its market share. The Pegasys pre-filled pen (ProClick in the US) has been launched in the US and key EU markets, making administration of the medicine more convenient.

Xeloda

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	627	517	+15	41	38
Western Europe	253	264	–3	17	20
Japan	128	112	+8	8	8
International	515	461	+9	34	34
Total sales	**1,523**	**1,354**	**+9**	**100**	**100**

Xeloda. For colorectal, stomach and breast cancer. Sales increased by 9% to 1.5 billion Swiss francs. Growth was driven primarily by strong demand in the US, China and Japan with increased US sales partly due to shortages of certain alternative cancer medicines. Sales in Western Europe were impacted by government-mandated price cuts in key markets.

Lucentis

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	1,481	1,523	–8	100	100
Total sales	**1,481**	**1,523**	**–8**	**100**	**100**

Lucentis. For wet age-related macular degeneration (wAMD), macular edema following central retinal vein occlusion (CRVO) and diabetic macular edema (DME). Sales declined by 8% to 1.5 billion Swiss francs due to the entry of a competitor drug to treat wAMD and CRVO. The recent launch of Lucentis to treat DME is on track and the uptake is partly offsetting the decline in wAMD and CRVO. Roche also filed a supplemental biologics license application (sBLA) for 0.5mg pro re nata (PRN) dosing in wAMD, which, if approved, will allow the promotion of less-than-monthly dosing.

Tarceva

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	571	484	+12	43	39
Western Europe	317	370	–13	24	30
Japan	112	92	+15	9	7
International	314	305	0	24	24
Total sales	**1,314**	**1,251**	**+2**	**100**	**100**

Tarceva. For advanced non-small cell lung (NSCLC) and pancreatic cancer. Sales rose by 2%, with growth in US, Brazil, China and Japan offsetting a decline in Western Europe that can be attributed to shorter treatment durations and a slight decrease in patient share in second-line NSCLC. Western European sales stabilised in the fourth quarter and regulatory filings were submitted for the approval of Tarceva in first-line epidermal growth factor receptor (EGFR) mutation-positive NSCLC in both the US and China. The US submission has been granted priority review, with an FDA decision expected in the second quarter of 2013.

CellCept

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	171	203	–20	19	21
Western Europe	230	284	–18	25	29
Japan	77	64	+14	8	6
International	431	440	–5	48	44
Total sales	**909**	**991**	**–11**	**100**	**100**

CellCept. For the prevention of solid organ transplant rejection. Sales again declined in 2012 due to continued generic erosion in the US and Western Europe following patent expiry in 2009 and 2010, respectively. Sales in many countries of the International region were also negatively affected by price pressure and increased use of generics, but sales grew in China. Continued growth in Japan reflects the position of CellCept as the standard of care in its approved indications.

Actemra/RoActemra

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	241	141	+62	29	23
Western Europe	265	198	+36	31	32
Japan	201	195	–2	24	31
International	135	84	+59	16	14
Total sales	**842**	**618**	**+33**	**100**	**100**

Actemra/RoActemra. For rheumatoid arthritis (RA) and systemic juvenile idiopathic arthritis. Sales continued to grow strongly in all approved indications and in all regions except Japan, where volume growth was offset by government price cuts. Sales increased particularly in the US and Western Europe, where Actemra/RoActemra continues to gain market share. Marketing and reimbursement approvals in additional countries continue to expand patient access to Actemra/RoActemra. Physicians increasingly see Actemra/RoActemra as the preferred drug for monotherapy in rheumatoid arthritis following the positive results of the ADACTA trial that showed superiority against adalimumab in this setting.

NeoRecormon/Epogin

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	–	–	–	–	–
Western Europe	253	310	–17	38	34
Japan	171	320	–50	25	36
International	250	266	–7	37	30
Total sales	**674**	**896**	**–26**	**100**	**100**

NeoRecormon/Epogin. For anemia/renal anemia. In a highly competitive market the Group's overall market share in the anemia franchise, including Mircera, was only slightly down for the year. Combined sales of Roche's NeoRecormon and Chugai's Epogin (epoetin beta) declined 26%. In the Western Europe and International regions sales were lower due to increasing biosimilar competition and a market decline in the cancer-related anemia segment, while competitive pressure and a lower reimbursement price resulted in reduced sales of Epogin in Japan.

The sustained decline in sales of NeoRecormon and Epogin was partly offset by growth in sales of the longer-acting erythropoiesis-stimulating agent Mircera, which rose 8% to 384 million Swiss francs. Much of this growth is due to the increasing number of patients switching to or starting treatment with Mircera in place of NeoRecormon/Epogin. The strongest contributions to higher Mircera sales came from Japan, where the product was launched in July 2011.

Bonviva/Boniva

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	75	313	–77	23	45
Western Europe	102	213	–51	32	31
Japan	–	–	–	–	–
International	146	170	–14	45	24
Total sales	**323**	**696**	**–54**	**100**	**100**

Bonviva/Boniva. For osteoporosis. The significant decrease in the US reflects falling market demand and entry of generics into the market. Sales in Western Europe were lower due to the continued impact of generics into the market together with pricing and reimbursement issues. The growth of 58% in the Asia–Pacific sub region was led by South Korea. However, this was more than offset by lower sales in the rest of the International region as the product was used less in competitor clinical studies.

Tamiflu

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	349	160	+106	62	44
Western Europe	8	53	–85	1	15
Japan	141	97	+38	25	27
International	62	49	+18	12	14
Total sales	**560**	**359**	**+48**	**100**	**100**

Tamiflu. For influenza A and B. Sales increased in 2012 mainly due to US sales for seasonal use in the last quarter of the year following the strong and widespread influenza season. Sales were also higher in Japan in 2012. This was partly offset by lower annual sales for pandemic stockpiling, which primarily related to the replacement of expiring pandemic stockpiles.

Zelboraf

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	112	30	+252	48	97
Western Europe	115	1	Over +500	49	3
Japan	–	–	–	–	–
International	7	–	–	3	–
Total sales	**234**	**31**	**Over +500**	**100**	**100**

Zelboraf. For BRAF V600E-mutation-positive metastatic melanoma. The US Food and Drug Administration (FDA) approved Zelboraf in August 2011. The FDA simultaneously approved Roche Diagnostics' cobas BRAF V600 Mutation Test, a companion diagnostic used to identify patients for whom treatment with Zelboraf is appropriate. Zelboraf is now approved in more than 40 countries. Sales were driven by the continued uptake in the US, reflecting the high unmet medical need in metastatic melanoma, and also by the strong uptake in Western Europe following approval at the start of 2012.

Perjeta

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	54	–	–	96	–
Western Europe	2	–	–	4	–
Japan	–	–	–	–	–
International	–	–	–	–	–
Total sales	**56**	**–**	**–**	**100**	**–**

Perjeta. For first-line HER2-positive metastatic breast cancer. Perjeta is used in treatment combinations alongside Herceptin and chemotherapy. It gained approval in the US, Switzerland and Mexico in 2012. The adoption of Perjeta in the US has been in line with expectations and the majority of physicians treating this type of breast cancer have prescribed Perjeta.

Pharmaceuticals Division – Sales by region

Region	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	13,856	12,223	+7	39	37
Western Europe	7,926	8,221	–2	22	25
Japan	4,108	3,817	+2	12	12
International	9,342	8,533	+9	27	26
– CEMAI [1]	*3,167*	*2,994*	*+8*	*9*	*9*
– Latin America	*2,619*	*2,408*	*+11*	*7*	*7*
– Asia–Pacific	*2,652*	*2,168*	*+15*	*8*	*7*
– Other regions	*904*	*963*	*–9*	*3*	*3*
Total sales	**35,232**	**32,794**	**+5**	**100**	**100**

1) Central and Eastern Europe, Middle East, Africa, Central Asia, Indian Subcontinent.

United States. Sales grew by 7% in US dollar terms. The leading products were the oncology medicines MabThera/Rituxan (+8%), Avastin (+0%) and Herceptin (+11%), with sales of 3.1 billion Swiss francs, 2.5 billion Swiss francs and 1.7 billion Swiss francs respectively. Pegasys (+49%), Activase/TNKase (+23%), Actemra/RoActemra (+62%), Zelboraf (+252%) and Xeloda (+15%) also boosted growth and compensated for the expected declines in Bonviva/Boniva, Lucentis and CellCept. Sales of Tamiflu increased, with a positive impact on sales growth of approximately 1 percentage point.

Western Europe. Sales decreased by 2% in constant currencies mainly due to generic competition for Bonviva/Boniva and CellCept as well as price pressure from government austerity measures and budget constraints. There was higher demand for the oncology products Avastin (+6%), MabThera/Rituxan (+6%) and Herceptin (+3%), which accounted for total sales of 5.1 billion Swiss francs. The launch of Zelboraf was also successful. There was further uptake of Actemra/RoActemra which was offset by price pressures. Sales of Mircera and NeoRecormon in the highly competitive renal anemia market were also lower.

Japan. Sales grew by 2% in Japanese yen terms. This was achieved in spite of government price cuts which had a negative impact on sales of approximately 6 percentage points. The major growth drivers were Mircera (+203%) and Avastin (+16%). MabThera/Rituxan sales rose by 8% and Tamiflu sales by 38%. Sales of Epogin fell 50% mainly due to patient treatment switching to Mircera.

International. Sales rose 9% driven by strong growth in Latin America, Asia–Pacific and CEMAI. Growth in Latin America was mainly due to oncology products, in particular Herceptin (+25%), Avastin (+13%) and MabThera/Rituxan (+7%). Sales growth was particularly strong in Brazil and Argentina. Higher demand for MabThera/Rituxan (+19%), Herceptin (+14%) and Xeloda (+18%) lifted sales in Asia–Pacific. China remains the main driver in this region, with overall sales growth of 27%. Sales growth in the CEMAI was mainly due to increased Herceptin, MabThera/Rituxan and Avastin sales, driven in part by tender sales in Algeria and Russia. Sales in Mexico decreased due to biosimilar competition to MabThera/Rituxan. Total sales in the E7 key emerging markets grew by 14%.

Pharmaceuticals Division – Sales for E7 leading emerging markets

Country	2012 (mCHF)	2011 (mCHF)	% change (CER) total	% of sales (2012)	% of sales (2011)
Brazil	941	940	+11	3	3
China	1,224	891	+27	3	3
India	64	83	–23	0	0
Mexico	408	427	–4	1	1
Russia	439	387	+14	1	1
South Korea	222	176	+21	1	1
Turkey	302	267	+15	1	1
Total sales	**3,600**	**3,171**	**+14**	**10**	**10**

Operating results

Pharmaceuticals Division – Royalties and other operating income

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Royalty income	1,490	1,206	+18
Income from out-licensing agreements	75	115	–38
Income from disposal of products and other	229	132	+68
Total – IFRS and Core basis	**1,794**	**1,453**	**+18**

The constant currency increase of 18% was due to higher income from royalties and product disposals. The increase in royalty income was due to higher Lucentis royalties and new royalty income for Eylea and Soliris sales. A significant part of the disposal income came from the disposal of Rocaltrol ampoules in Japan and the rights for Ostac, Vesanoid and Rohypnol in certain markets. These increases were partly offset by lower income from out-licensing agreements.

Pharmaceuticals Division – Cost of sales

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(4,277)	(4,340)	–5
Royalty expenses	(1,246)	(1,339)	–9
Collaboration and profit-sharing agreements	(1,556)	(1,375)	+8
Impairment of property, plant and equipment	(18)	1	–
Cost of sales – Core basis	**(7,097)**	**(7,053)**	**–3**
Global restructuring plans	(92)	(167)	–45
Amortisation of intangible assets	(146)	(137)	+1
Impairment of intangible assets	(13)	(32)	–60
East Japan Earthquake	–	(47)	–100
Total – IFRS basis	**(7,348)**	**(7,436)**	**–5**

Core costs decreased by 3% at constant exchange rates due to lower manufacturing costs and royalty expenses. As a percentage of sales, cost of sales declined to 20.1% (2011: 21.5%). The 5% decrease in manufacturing cost of goods sold and period costs was mainly due to productivity improvements and product mix effects. Royalty expenses were 9% lower, driven by a decline in royalty expenses related to sales of Bonviva/Boniva and CellCept and the 2011 back royalty expenses related to the Rituxan arbitration. Expenses from collaboration and profit-sharing agreements increased, mainly driven by higher co-promotion expenses due to higher sales of MabThera/Rituxan, Tarceva and Xolair in the US. Global restructuring costs relate mostly to write-offs of property, plant and equipment and other manufacturing costs related to production network rationalisation and the dalcetrapib trial termination.

Pharmaceuticals Division – Marketing and distribution

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(5,851)**	**(5,564)**	**+2**
Global restructuring plans	(63)	(65)	–8
East Japan Earthquake	–	(7)	–100
Total – IFRS basis	**(5,914)**	**(5,636)**	**+2**

Core costs increased at constant exchange rates by 2% and as a percentage of sales, costs fell to 16.6% (2011: 16.9%). Sales and marketing efforts focussed on driving growth in emerging markets, the oncology portfolio, including the extension of Avastin in the ovarian cancer indication, the new Pegasys triple-combination therapy and the product launches of Zelboraf, Perjeta and Erivedge. The increase was also partly due to initiatives assisting patient access to healthcare. Significantly lower costs were incurred for bad debt expenses compared to 2011. Global restructuring costs primarily related to sales force restructuring initiatives.

Pharmaceuticals Division – Research and development

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Research and development – Core basis	**(7,529)**	**(7,173)**	**+2**
Global restructuring plans	(489)	(162)	+192
Amortisation of intangible assets	(35)	(15)	+127
Impairment of intangible assets	(476)	(47)	Over +500
Total – IFRS basis	**(8,529)**	**(7,397)**	**+12**

Core costs increased by 2% at constant exchange rates. Research and development costs as a percentage of sales were lower at 21.4% compared to 21.9% in 2011. There were increased investments in central nervous system, mostly due to the ramp-up of studies in bitopertin and ocrelizumab MS, and the increasing number of programmes for Alzheimer's disease. These were partially offset by lower life cycle investments in inflammation and oncology due to the decision to discontinue inflammation research in Nutley and the discontinuation of Avastin adjuvant breast cancer studies in 2011. In addition the Pharmaceuticals Division spent 209 million Swiss francs on the in-licensing of pipeline compounds and technologies, which are capitalised as intangible assets. In total the division spent 7.7 billion Swiss francs on internal and purchased research and development from in-licensing and other alliance deals. The 2012 impairments of intangible assets include 112 million Swiss francs from the decision to stop further development activities on dalcetrapib, 103 million Swiss francs from the returning of the global rights to the monoclonal antibody RG 7334 anti-PLGF MAb to the alliance partners and also 162 million Swiss francs from the latest clinical data assessment of a project acquired as part of the Marcadia acquisition. In addition 99 million Swiss francs of impairment charges arose as a result of portfolio prioritisation decisions and following recent clinical data. Global restructuring costs include 208 million Swiss francs of employee-related costs and 75 million Swiss francs of property plant and equipment impairments related to the closure of the Nutley site and 91 million Swiss francs following the dalcetrapib trial termination, which consists of provisions for remaining trial costs and write-offs of inventories. Other restructuring costs of 115 million Swiss francs mainly relate to site closure and other costs resulting from the Operational Excellence programme.

Pharmaceuticals Division – General and administration

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(943)	(967)	–5
Restructuring expenses	–	(3)	–100
Gains (losses) on disposal of property, plant and equipment	1	–	–
Business taxes	(213)	(199)	+2
Other general items	94	118	–16
General and administration – Core basis	**(1,061)**	**(1,051)**	**–3**
Global restructuring plans	(466)	(456)	–2
Alliances and business combinations	45	39	+10
Legal and environmental settlements	(76)	(56)	+32
East Japan Earthquake	–	(3)	–100
Total – IFRS basis	**(1,558)**	**(1,527)**	**–2**

Core costs decreased by 3% at constant exchange rates. General and administration expenses as a percentage of sales decreased by 0.2 percentage points to 3.0%. Administration costs decreased due to strict cost containment and some organisational shifts to the corporate functions. Business taxes increased mainly driven by favourable tax credits in 2011. Global restructuring costs relate to the site closure costs for Nutley, mainly impairments of property, plant and equipment, and the division's global informatics restructuring programme. The release of the provision for contingent consideration from the Marcadia acquisition resulted in a net income for alliance and business combination costs.

Roche Pharmaceuticals and Chugai sub-divisional operating results

Pharmaceuticals sub-divisional operating results in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
	2012	2011	2012	2011	2012	2011
Sales	31,124	28,977	4,108	3,817	35,232	32,794
Core operating profit	14,652	12,768	874	723	15,488	13,406
– margin, % of sales	47.1	44.1	21.3	18.9	44.0	40.9
Operating profit	12,910	11,743	805	593	13,677	12,251
– margin, % of sales	41.5	40.5	19.6	15.5	38.8	37.4
Operating free cash flow	12,987	12,146	1,065	768	14,052	12,914
– margin, % of sales	41.7	41.9	25.9	20.1	39.9	39.4

Pharmaceuticals Division total core operating profit and operating profit both include the elimination of 38 million Swiss francs (2011: 85 million Swiss francs) of unrealised inter-company profits between Roche Pharmaceuticals and Chugai.

Sales increased in both sub-divisions. In constant currencies sales and core operating profit of Roche Pharmaceuticals increased significantly with sales and gross profit growing more than operating expenses. Sales by Chugai also grew, as well as Chugai core operating profit which increased despite a lower gross margin, due to product mix effects. The growth in the core operating margin was due to strict cost containment in all operating expenses.

Financial position

Pharmaceuticals Division – Net operating assets

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	7,841	7,861	0	+3	262	(282)
Inventories	3,584	3,177	+13	+18	563	(156)
Payables	(5,877)	(5,593)	+5	+8	(433)	149
Net working capital	**5,548**	**5,445**	**+2**	**+7**	**392**	**(289)**
Property, plant and equipment	10,704	11,586	–8	–4	(517)	(365)
Goodwill and intangible assets	4,258	4,851	–12	–10	(463)	(130)
Provisions	(2,249)	(2,124)	+6	+8	(179)	54
Other long-term assets, net	242	250	–3	+1	0	(8)
Long-term net operating assets	**12,955**	**14,563**	**–11**	**–8**	**(1,159)**	**(449)**
Net operating assets	**18,503**	**20,008**	**–8**	**–4**	**(767)**	**(738)**

The absolute amount of the movement between the 2012 and 2011 consolidated balances reported in Swiss francs is split between actual 2012 transactions (translated at average rates for 2011) and the currency translation adjustment (CTA) that arises on consolidation. The 2012 transactions include non-cash movements and therefore the movements in this table are not the same as amounts shown in the operating free cash flow (which only includes the cash movements). A full consolidated balance sheet is given on page 47 of the Consolidated Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 151.

Currency translation effects on balance sheet amounts. Compared to the start of 2012 the Swiss franc strengthened against some major currencies by the year-end, most importantly against the US dollar and the Japanese yen. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc was stable against the euro during 2012.

Net working capital. The increase of 7% at constant exchange rates was mainly due to an increase in inventories. The balance sheet value of inventories increased mainly due to inventory building to support the recent launches and continuing approvals for new products such as Zelboraf, Perjeta and Erivedge and in preparation for upcoming launches such as T-DM1 and MabThera subcutaneous formulation. Higher inventory levels were also driven by the need to ensure supply for the increased sales demand and business expansion in emerging markets. Receivables increased with sales growth in the US, in particular with the timing of strong Tamiflu sales towards year end, and with the continued growth of the business in China, Latin America and CEMAI. In addition royalty receivables increased due to higher Lucentis and other product royalties. These effects were partly offset by strong collections of outstanding receivables from some Southern European countries. Payables increased mainly due to increased accrued liabilities for sales related chargebacks, employee incentives and accrued royalties.

Long-term net operating assets. These decreased by 8% at constant exchange rates mainly due to the impact of the global restructuring programmes and impairments of intangible assets. The significant majority of these were recorded in the first half of 2012. Impairments of property, plant and equipment were made in respect of the Nutley site closure and provisions were made for the employee-related costs of both the Nutley site closure and global informatics reorganisation. Intangibles decreased mainly due to impairments in respect of dalcetrapib, the portfolio prioritisation decision regarding the monoclonal antibody RG 7334 anti-PLGF MAb, the impairment of a project acquired as part of the Marcadia acquisition and other impairment charges related to portfolio prioritisation and clinical data.

Free cash flow

Pharmaceuticals Division – Operating free cash flow

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Operating profit	**13,677**	**12,251**	**+10**
– Depreciation, amortisation and impairment	2,171	1,520	+38
– Provisions	160	(352)	–
– Equity compensation plans	(352)	280	–
– Other	173	838	–81
Operating profit cash adjustments [1]	**2,152**	**2,286**	**–10**
Operating profit, net of operating cash adjustments	**15,829**	**14,537**	**+7**
(Increase) decrease in net working capital			
– Receivables	(264)	(316)	–24
– Inventories	(692)	(87)	Over +500
– Payables	468	(3)	–
Total (increase) decrease in net working capital	**(488)**	**(406)**	**+15**
Investments in property, plant and equipment	(1,079)	(981)	+8
Investments in intangible assets	(210)	(236)	–15
Total investments	**(1,289)**	**(1,217)**	**+3**
Operating free cash flow	**14,052**	**12,914**	**+7**
– as % of sales	39.9	39.4	+0.8

1) A detailed breakdown is provided on page 150.

The Pharmaceuticals Division's operating free cash flow increased to 14.1 billion Swiss francs. The increased cash generation from the underlying business was partly offset by increases in net working capital and higher investments in property, plant and equipment. These investments included the continuing site development plans in Switzerland and China, the construction of new production and research and development facilities by Chugai and the enhancement and expansion of various production and distribution facilities in the US and Switzerland, including advanced technology quality control laboratories.

Receivables increased but at a lower level than in 2011. Cash invested in inventories increased further due to launch and pre-launch preparations for new products and ensuring supply for continued sales growth in both the US and key growth markets, such as Asia–Pacific, especially China and Latin America.

There was an increase in the cash outflow from equity compensation plans in 2012, as the increase in the Roche share price led to increasing levels of exercising of employee stock options.

Diagnostics Division operating results

Diagnostics Division operating results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	10,267	9,737	+5	+4
Royalties and other operating income	151	129	+17	+14
Cost of sales	(4,827)	(4,506)	+7	+6
Marketing and distribution	(2,625)	(2,413)	+9	+7
Research and development	(1,023)	(929)	+10	+9
General and administration	(659)	(362)	+82	+77
Operating profit	**1,284**	**1,656**	**–22**	**–25**
– margin, % of sales	12.5	17.0	–4.5	–4.7
Core results [1]				
Sales	10,267	9,737	+5	+4
Royalties and other operating income	151	129	+17	+14
Cost of sales	(4,347)	(4,064)	+7	+6
Marketing and distribution	(2,541)	(2,403)	+6	+4
Research and development	(946)	(900)	+5	+4
General and administration	(397)	(321)	+24	+21
Core operating profit	**2,187**	**2,178**	**0**	**–2**
– margin, % of sales	21.3	22.4	–1.1	–1.4
Financial position				
Net working capital	3,347	3,501	–4	–3
Long-term net operating assets	11,382	12,022	–5	–4
Net operating assets	**14,729**	**15,523**	**–5**	**–3**
Free cash flow				
Operating free cash flow	1,826	1,259	+45	+43
– margin, % of sales	17.8	12.9	+4.9	+4.9

1) See pages 146–149 for definition of Core results and Core EPS.

Sales

Diagnostics Division sales continued to increase ahead of the *in vitro* diagnostics (IVD) global market with a growth of 4% at constant exchange rates. Professional Diagnostics, with 8% sales growth, was the main growth contributor led by its Immunodiagnostics business. Tissue Diagnostics sales grew by 12% driven by the advanced staining business. Both business areas grew substantially ahead of their respective markets. Diabetes Care sales decreased by 4% mainly due to reimbursement changes in Europe and difficult market conditions. Sales in Molecular Diagnostics increased by 4% led by the blood screening business and HCV monitoring. Applied Science sales decreased by 3% due to increasing competition in sequencing and a slowdown in public research funding.

Diagnostics Division – Sales by business area

Business area	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Professional Diagnostics	5,165	4,709	+8	51	48
Diabetes Care	2,566	2,652	–4	25	27
Molecular Diagnostics	1,168	1,094	+4	11	11
Applied Science	737	740	–3	7	8
Tissue Diagnostics	631	542	+12	6	6
Total sales	**10,267**	**9,737**	**+4**	**100**	**100**

Professional Diagnostics

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	2,386	2,369	+2	46	50
North America	962	859	+6	19	18
Rest of the World	1,817	1,481	+18	35	32
Total sales	**5,165**	**4,709**	**+8**	**100**	**100**

Professional Diagnostics. Sales grew at about double the rate of the global market. The business area strengthened its leading position in the professional diagnostics market which includes IVD products for clinical laboratories and near patient testing. The primary growth driver was again the immunoassay business (+15%). Roche Diagnostics enjoys competitive advantage from its menu of over 100 different tests, the broadest in the industry for an instrument series. Clinical chemistry solutions for laboratories, the second largest part of the business, saw continued demand (+5%). Instrument placements in both areas increased by 13%, due to strong demand in the emerging markets as well as increased supply by our partner Hitachi High Technology after the effects of the East Japan Earthquake in 2011. In the Point of Care business growth was driven by coagulation monitoring devices where the 8% sales growth was above the market.

From a regional view, growth mainly came from emerging markets. This was led by the Asia–Pacific region (+22%) and particularly China (+35%), and the Latin America region (+16%). Professional Diagnostics also grew ahead of the market in EMEA (Europe, Middle East and Africa) and North America, with particularly increased market penetration in North America supported through a number of key launches.

The business further strengthened its menu of tests, with launches of four immunoassays in various markets including Vitamin D in the US. The Vitamin D test has seen a strong market uptake worldwide with over 7 million tests in the 19 months since it was first launched in the EU. Professional Diagnostics also introduced three systems for near patient testing in the hospital or at the physician's office. These are the cobas b 123 (blood gas) and Accu-Chek Inform II (blood glucose), both of which have been launched in the US, and the cobas b 101 (blood lipid/glucose) which has been launched in the EU. New IT systems and the cobas p 312, a new pre-analytics system automating preparatory steps in the laboratory, were also launched.

Diabetes Care

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	1,468	1,585	–6	57	60
North America	579	571	–4	23	22
Rest of the World	519	496	+4	20	18
Total sales	**2,566**	**2,652**	**–4**	**100**	**100**

Diabetes Care. Sales declined by 4% due to reimbursement cuts for blood glucose monitoring supplies in major European markets, including Germany, France and Poland, and intensified pressure on prices. There was also increasing competition from low-cost providers, particularly in the US, where Roche Diabetes Care launched its new Accu-Chek portfolio in 2012. Overall sales declined in North America by 4%. In the rest of the world growth was driven by Latin America (+12%). While the blood glucose monitoring segment declined by 5% over the year, sales of insulin delivery systems were up 8%, mainly due to the increased market uptake of the FlexLink infusion system.

In 2012 the business introduced two products in the US, which both showed promising market uptake: the blood glucose monitoring system Accu-Chek Nano SmartView in April and the meter-pump combination Accu-Chek Combo system in October. Diabetes Care also continued the launch of the next-generation Accu-Chek Mobile system in the EU and Japan. This is now available in 17 countries and growing by 26%.

In July 2012 the Diabetes Care business unit initiated a restructuring to secure long-term profitability, with measures taken in research and development, marketing and distribution and manufacturing activities. The business also re-allocated R&D investments to continuous glucose monitoring and insulin pumps which are expected to have the best market potential for differentiated products.

Molecular Diagnostics

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	425	438	–1	36	40
North America	418	368	+8	36	34
Rest of the World	325	288	+8	28	26
Total sales	**1,168**	**1,094**	**+4**	**100**	**100**

Molecular Diagnostics. Roche Molecular Diagnostics retained its leadership position in the global molecular diagnostics market holding one third of the global market. Sales growth was driven by the blood screening business (+5%), the HPV (cervical cancer screening) and Microbiology businesses (+11%) and virology testing (+2%), which was led by demand for HCV Monitoring.

Regionally, growth was driven by North America (+8%), primarily due to HCV Monitoring and HPV testing. In EMEA, growth in blood screening particularly in the Middle East was partly offset by lower virology sales due to price pressure. In the rest of the world, Asia-Pacific (+13%) and particularly China (+49%) performed well.

The cobas HPV test for cervical cancer screening continued its positive uptake in the EU and the US, with 86 new contracts signed in the US in 2012. The business area also expanded its instrument portfolio in the US with a pre-analytical system and launched three new or next-generation tests for chlamydia/gonorrhoea, cytomegalovirus and HIV. Five new internal and two external programmes were started for the development of companion diagnostics, adding to the close to 50 on-going collaborations.

Applied Science

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	280	299	–5	38	40
North America	273	271	–5	37	37
Rest of the World	184	170	+3	25	23
Total sales	**737**	**740**	**–3**	**100**	**100**

Applied Science. Sales declined by 3% primarily affected by subdued public research funding and increasing competition in gene sequencing. The main sales decline was Genomics sales (sequencing and microarrays) which were 19% lower than 2011. Partly offsetting this was growth in Applied Science's two market leading businesses – qPCR&NAP (instruments and reagents for the detection, quantification and purification of nucleic acids) and Custom Biotech (raw materials, reagents and analytic systems for the healthcare industry), which increased by 5% and 8% respectively. In the rest of the world the increases in qPCR&NAP and Custom Biotech led to growth, driven by Latin America (+6%).

From June 2012 onwards, under a restructuring initiative, Applied Science has been consolidating its product segments to focus on those with the greatest market potential. As a consequence, it has streamlined its cellular analysis portfolio, exited the NimbleGen microarray business, while keeping NimbleGen's sequence capture product line, and closed the site in Reykjavik, Iceland.

Roche Applied Science continued to invest in sequencing as a focus area. In the fourth quarter of 2012 it launched new software for its GS FLX+ sequencing system for enhanced long-read performance, introduced further sequence capture products and started a collaboration with PSS for an automated emulsion PCR instrument to improve the sequencing workflow. The business also expanded its Custom Biotech and qPCR portfolio with a new bioprocess analyser, Cedex Bio HT for biopharmaceutical manufacturing, and the LightCycler 96 qPCR instrument. The LightCycler 96 saw a very positive uptake with close to 100 instruments sold within two months.

Tissue Diagnostics

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	151	130	+18	24	24
North America	402	355	+7	64	65
Rest of the World	78	57	+29	12	11
Total sales	**631**	**542**	**+12**	**100**	**100**

Tissue Diagnostics. Sales grew substantially ahead of the market at 12%, expanding the business' market leadership position in tissue-based cancer diagnostics in all regions. In North America sales were driven by instrument placements, reagent growth and new instrument launches, which were partially offset by recent changes in reimbursement codes and College of American Pathologists' guidelines to reduce the use of negative reagent controls. Roche Tissue Diagnostics' sales growth in the other regions reflects increasing market penetration and rising demand for automated tissue diagnostics solutions particularly in emerging markets.

Advanced staining (systems and reagents for pathology labs to detect proteins and genes in tissue samples) remained the primary growth driver with a sales increase of 13%, due to increasing reagent sales as well as placements of the BenchMark series of instruments. This was supported by the Companion Diagnostics business which more than doubled its revenues through research on diagnostic biomarkers and product development work for partners in the pharmaceuticals industry. In 2012 the business initiated ten new companion diagnostic projects with partners.

In 2012 Roche Tissue Diagnostics launched the BenchMark Special Stains platform and the VENTANA iScan HT scanner, both with positive market uptake, together accounting for more than 170 placements. The business also expanded its advanced staining menu with 12 new immunohistochemistry (IHC) reagents, including tests for lung, pancreatic and prostate cancer. One of these is ALK (anaplastic lymphoma kinase) IHC, a key companion diagnostic which was launched in October 2012 in the EU in parallel with Pfizer's crizotinib to select patients likely to benefit from this lung cancer drug.

Diagnostics Division – Sales by region

Region	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	4,710	4,821	–1	46	50
North America	2,634	2,424	+3	26	25
Asia-Pacific	1,556	1,281	+15	14	13
Latin America	774	686	+15	8	7
Japan	593	525	+7	6	5
Total sales	**10,267**	**9,737**	**+4**	**100**	**100**

Divisional sales growth was primarily driven by Asia-Pacific and Latin America. In these regions Professional Diagnostics continued to be the main growth driver, with substantial increases in Diabetes Care in Latin America. North America saw growth of the clinical laboratory business (Professional, Tissue and Molecular Diagnostics) and the creation of further growth momentum with the launch of over 40 major products in the US in 2012. In Japan sales grew at three times the rate of the market, driven by Professional Diagnostics. In the EMEA region austerity measures and price pressure were felt in major European markets. This particularly impacted the Diabetes Care business, while Professional and Tissue Diagnostics continued to grow sales and gain market share.

Diagnostics Division – Sales for E7 leading emerging markets

Country	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Brazil	262	260	+11	3	3
China	655	481	+26	6	5
India	101	86	+26	1	1
Mexico	114	101	+13	1	1
Russia	199	184	+8	2	2
South Korea	155	135	+10	2	1
Turkey	132	120	+11	1	1
Total sales	**1,618**	**1,367**	**+17**	**16**	**14**

The sales growth in the E7 emerging markets was led by China, with substantial contributions from Brazil, India and Russia. The 26% growth in China was driven by the government's continued efforts to improve the healthcare system, along with the Roche Diagnostics' investments to strengthen its market presence and expand its customer base beyond very large cities and hospitals. The growth in Brazil came from continued success with major public and private tenders for laboratory solutions, and in India from a major public contract in Diabetes Care and growth in the laboratory business.

Operating results

Diagnostics Division – Royalties and other operating income

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Royalty income	136	96	+38
Income from out-licensing agreements	4	22	–82
Income from disposal of products and other	11	11	–8
Total – IFRS and Core basis	**151**	**129**	**+14**

Royalty and other operating income increased by 14% at constant exchange rates. This is mainly the result of back royalty payments as well as service royalty growth in Molecular Diagnostics and the receipt of a royalty payment in Diabetes Care. Income from out-licensing agreements decreased as various upfront and one-time payments were received in 2011.

Diagnostics Division – Cost of sales

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(4,173)	(3,924)	+5
Royalty expenses	(174)	(138)	+24
Collaboration and profit-sharing agreements	–	(1)	–100
Impairment of property, plant and equipment	–	(1)	–100
Cost of sales – Core basis	**(4,347)**	**(4,064)**	**+6**
Global restructuring plans	(111)	(27)	+307
Amortisation of intangible assets	(341)	(361)	–7
Impairment of intangible assets	(28)	(54)	–49
Total – IFRS basis	**(4,827)**	**(4,506)**	**+6**

Cost of sales increased by 6% at constant exchange rates on a core basis primarily due to a 5% increase in manufacturing cost of goods sold and period costs. While previous cost reduction initiatives continued to have a positive impact, this effect was more than offset by an increase in period costs driven by higher depreciation and placement and installation costs for new instruments. Manufacturing cost of goods sold increased due to changes in the product mix and an increase in the overall installed instrument base. Instrument placements were up by 13% in the Clinical Chemistry and Immunology businesses driven by strong customer demand and partly due to the installation of instruments sourced from Hitachi High Technologies that had been subject to supply disruptions following the East Japan Earthquake in March 2011. The increase in royalty expenses was due to higher sales of products with in-licensed intellectual property. Overall the cost growth on a core basis was above sales growth resulting in a higher cost of sales ratio of 42.3% (2011: 41.7%). Global restructuring costs were incurred mainly due to costs related to the closure of the Graz and Burgdorf sites and reorganisations in the Applied Science and Diabetes Care businesses. Amortisation of product intangibles decreased as some intangible assets were fully amortised during 2011.

Diagnostics Division – Marketing and distribution

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(2,541)**	**(2,403)**	**+4**
Global restructuring plans	(78)	(5)	Over +500
Amortisation of intangible assets	(6)	(5)	+12
Total – IFRS basis	**(2,625)**	**(2,413)**	**+7**

The increase of 4% at constant exchange rates on a core basis mainly reflects higher costs in Professional and Molecular Diagnostics driven by sales force increases in China and factoring costs related to the reduction of outstanding trade receivables in Southern Europe for the whole division. On a core basis marketing and distribution costs as a percentage of sales remained at 24.7%. Global restructuring costs were incurred mainly due to the reorganisations in the Applied Science business.

Diagnostics Division – Research and development

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Research and development – Core basis	**(946)**	**(900)**	**+4**
Global restructuring plans	(67)	(22)	+205
Amortisation of intangible assets	(2)	(2)	+1
Impairment of intangible assets	(8)	(5)	+83
Total – IFRS basis	**(1,023)**	**(929)**	**+9**

Core costs increased by 4% at constant exchange rates. This was driven by the development of new immunoassays and tests in Professional Diagnostics, the cobas 6800/8800 platform in Molecular Diagnostics and instruments in Tissue Diagnostics. These increases were partially offset by cost savings in Applied Science and Diabetes Care. As a percentage of sales, research and development costs were stable at 9.2%. Global restructuring costs were mainly due to costs related to the Operational Excellence programme and the reorganisation in the Diabetes Care business.

Diagnostics Division – General and administration

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(354)	(327)	+7
Restructuring expenses	–	3	–100
Gains (losses) on disposal of property, plant and equipment	(1)	–	–
Other general items	(42)	3	–
General and administration – Core basis	**(397)**	**(321)**	**+21**
Global restructuring plans	(50)	(18)	+171
Impairment of intangible assets	(187)	–	–
Alliances and business combinations	(12)	3	–
Legal and environmental settlements	(13)	(26)	–51
Total – IFRS basis	**(659)**	**(362)**	**+77**

Costs increased by 21% at constant exchange rates on a core basis. The 7% cost increase in administration was mainly driven by investments in various efficiency initiatives, mostly consisting of IT costs, and the formation of new sales and distribution entities during 2012. Costs in other general items increased compared to 2011 with a base effect due to the income from the release of a provision for royalties. As a percentage of sales, costs increased by 0.6 percentage points to 3.9%. Global restructuring costs were mainly due to employee-related costs arising from the Graz transfer and to a smaller extent in the Applied Science business area. In addition, goodwill impairment charges of 187 million Swiss francs were incurred for the full write-off of the goodwill from the NimbleGen acquisition, resulting from the decision to exit the Microarrays business as part of the reorganisation of the Applied Science business area.

Financial position

Diagnostics Division – Net operating assets

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	3,241	3,593	–10	–9	(292)	(60)
Inventories	1,958	1,883	+4	+6	120	(45)
Payables	(1,852)	(1,975)	–6	–5	97	26
Net working capital	**3,347**	**3,501**	**–4**	**–3**	**(75)**	**(79)**
Property, plant and equipment	4,572	4,484	+2	+3	149	(61)
Goodwill and intangible assets	7,436	8,118	–8	–7	(530)	(152)
Provisions	(530)	(481)	+10	+12	(56)	7
Other long-term assets, net	(96)	(99)	–3	–3	3	0
Long-term net operating assets	**11,382**	**12,022**	**–5**	**–4**	**(434)**	**(206)**
Net operating assets	**14,729**	**15,523**	**–5**	**–3**	**(509)**	**(285)**

The absolute amount of the movement between the 2012 and 2011 consolidated balances reported in Swiss francs is split between actual 2012 transactions (translated at average rates for 2011) and the currency translation adjustment (CTA) that arises on consolidation. The 2012 transactions include non-cash movements and therefore the movements in this table are not the same as amounts shown in the operating free cash flow (which only include the cash movements). A full consolidated balance sheet is given on page 47 of the Consolidated Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 151.

Currency translation effects on balance sheet amounts. Compared to the start of 2012 the Swiss franc strengthened against some major currencies by the year-end, most importantly against the US dollar and the Japanese yen. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc was stable against the euro during 2012.

Net working capital. Net working capital decreased by 3% at constant exchange rates as increases in inventories and decreases in payables have been more than offset by a reduction of receivables. Inventory increases were due to the launch and growth of key products in Professional Diagnostics and Tissue Diagnostics, higher safety stock levels in Asia Pacific (mainly South Korea, China and Vietnam) due to increasing market demand and the establishment of a Middle-East Hub. The main factors for the decreases in receivables are strong collections and factoring initiatives in Southern European countries, and all regions except North America show a reduction in receivables ratios compared to 2011. Payables decreased by 5% compared to the end of 2011 due to lower accruals and lower trade payables.

Long-term net operating assets. The decrease of 4% at constant exchange rates was due to a decrease in intangible assets due to the NimbleGen goodwill impairment and increases in provisions, mainly due to global restructuring plans. Property, plant and equipment increased as additions, especially due to high instrument placements in China, were only partially offset by depreciation.

Free cash flow

Diagnostics Division – Operating free cash flow

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Operating profit	**1,284**	**1,656**	**–25**
– Depreciation, amortisation and impairment	1,418	1,193	+17
– Provisions	76	(55)	–
– Equity compensation plans	(29)	25	–
– Other	272	192	+43
Operating profit cash adjustments[1]	**1,737**	**1,355**	**+27**
Operating profit, net of operating cash adjustments	**3,021**	**3,011**	**–2**
(Increase) decrease in net working capital			
– Receivables	218	(635)	–
– Inventories	(210)	(333)	–39
– Payables	(87)	203	–
Total (increase) decrease in net working capital	**(79)**	**(765)**	**–93**
Investments in property, plant and equipment	(1,091)	(977)	+11
Investments in intangible assets	(25)	(10)	+158
Total investments	**(1,116)**	**(987)**	**+12**
Operating free cash flow	**1,826**	**1,259**	**+43**
– as % of sales	17.8	12.9	+4.9

1) A detailed breakdown is provided on page 150.

The operating free cash flow of the Diagnostics Division increased by 43% at constant exchange rates despite a decline of the operating profit. This was primarily due to a lower increase in net working capital in 2012 compared to 2011. The strong collection of trade receivables and cash received from factoring initiatives resulted in a decrease in receivables. The higher inventory levels resulted from the launch and growth of key products in Professional Diagnostics and Tissue Diagnostics, higher safety stock levels in Asia Pacific (mainly South Korea, China and Vietnam) due to increasing market demand and the establishment of a Middle-East Hub. Payables decreased due to lower accruals and lower trade payables. Capital expenditure for property, plant and equipment increased by 11%, mainly driven by investments in China. In total the operating free cash flow margin increased by 4.9 percentage points.

Corporate operating results

Corporate operating results summary

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(457)	(402)	+13
Gains (losses) on divestment of subsidiaries	–	4	–100
Other general items	(58)	(37)	+54
General and administration costs – Core basis[1)]	**(515)**	**(435)**	**+17**
Global restructuring plans	(20)	(18)	+16
Alliances and business combinations	(1)	–	–
Legal and environmental settlements	(300)	–	–
Total costs – IFRS basis	**(836)**	**(453)**	**+81**
Financial position			
Net working capital	(71)	(42)	+70
Long-term net operating assets	(309)	2	–
Net operating assets	**(380)**	**(40)**	**Over +500**
Free cash flow			
Operating free cash flow	(489)	(440)	+11

1) See pages 146–149 for definition of Core results and Core EPS.

General and administration costs increased by 17% at constant exchange rates as a result of the shift of certain functions from the Pharmaceuticals and Diagnostics Divisions to Corporate and increased human resources and informatics costs from various initiatives. Total costs on an IFRS basis grew due to increased environmental provisions of 243 million Swiss francs as an initial estimate of the costs of the additional remediation activities that may be needed at the Nutley site in the US prior to it being sold. Further environmental costs were for the estimated additional remediation costs of a landfill site near Grenzach, Germany, that was previously used by manufacturing operations that were closed some years ago. Further details of these matters are given in Notes 7 and 24 to the Consolidated Financial Statements.

Corporate operating free cash flow showed an increase in the net outflow driven by the higher administration expenses described above.

Foreign exchange impact on operating results

The Group's exposure to movements in foreign currencies affecting its operating results, as expressed in Swiss francs, is summarised by the following key figures and comments.

Growth (reported at CER and Swiss francs)

	% change (CER)		% change (CHF)	
	2012	2011	2012	2011
Pharmaceuticals Division				
Sales	+5	0	+7	–12
Core operating profit	+13	+5	+16	–9
Diagnostics Division				
Sales	+4	+6	+5	–7
Core operating profit	–2	+14	0	–1
Group				
Sales	+4	+1	+7	–10
Core operating profit	+11	+6	+13	–9

Exchange rates against the Swiss franc

	31 December 2012	Average 2012	31 December 2011	Average 2011
1 USD	0.91	0.94	0.94	0.89
1 EUR	1.21	1.21	1.22	1.23
100 JPY	1.06	1.17	1.21	1.11

In 2012 on average the Swiss franc was weaker compared to the average 2011 rates for many currencies including the US dollar and Japanese yen, but stronger against some others, notably the euro and Brazilian real. The overall impact is positive on the income statement and cash flows expressed in Swiss francs compared to the results at constant exchange rates. For sales these developments resulted in a positive impact of 3 percentage points, equivalent to 1.1 billion Swiss francs when translated into Swiss francs. The currency translation exposure for the operating profit is mitigated by the Group having the majority of its cost base located outside of Switzerland. Core operating profit increased in Swiss francs by 13% compared to an increase of 11% at constant exchange rates. This positive impact of 2 percentage points is equivalent to 0.4 billion Swiss francs. The sensitivity of Group sales and core operating profit to a 1% movement in average foreign currency exchange rates against the Swiss franc during 2012 is shown in the table below.

Currency sensitivities

Impact of 1% rise in average exchange rate versus the Swiss franc	Sales (mCHF)	Core operating profit (mCHF)
US dollar	167	66
Euro	98	48
Japanese yen	47	20
All other currencies	121	72

The Group's revenues are primarily generated from sales of products to customers. Such revenues are mainly received in the local currency of the customer's home market, although in certain emerging markets invoicing is made in major international currencies such as the US dollar and euro. The costs of sales and marketing and also some administration costs follow the same currency pattern as sales. The majority of research and development activities are incurred at the Group's global research facilities, and therefore the costs are more concentrated in US dollars, Swiss francs and euros. General and administration costs tend to be incurred mainly at central locations in the US, Switzerland and Germany. Obviously the large majority of Chugai's costs are denominated in Japanese yen.

Treasury and taxation results

Treasury and taxation results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Operating profit	14,125	13,454	+5	+3
Associates	–	12	–100	–100
Financial income	471	647	–27	–30
Financing costs	(2,273)	(2,228)	+2	–2
Profit before taxes	**12,323**	**11,885**	**+4**	**+2**
Income taxes	(2,550)	(2,341)	+9	+5
Net income	**9,773**	**9,544**	**+2**	**+1**
Attributable to				
– Roche shareholders	9,539	9,343	+2	+1
– Non-controlling interests	234	201	+16	+10
Core results [1]				
Operating profit	17,160	15,149	+13	+11
Associates	–	12	–100	–100
Financial income	471	647	–27	–30
Financing costs	(2,273)	(2,228)	+2	–2
Profit before taxes	**15,358**	**13,580**	**+13**	**+11**
Income taxes	(3,480)	(2,895)	+20	+16
Net income	**11,878**	**10,685**	**+11**	**+10**
Attributable to				
– Roche shareholders	11,643	10,470	+11	+10
– Non-controlling interests	235	215	+9	+3
Financial position – Treasury and taxation				
Net debt	(10,599)	(15,566)	–32	–31
Pensions	(6,585)	(4,952)	+33	+35
Income taxes	1,591	174	Over +500	Over +500
Financial long-term assets	339	360	–6	–3
Derivatives, net	289	170	+70	+71
Collateral, net	(356)	(233)	+53	+53
Interest payable	(749)	(887)	–16	–13
Other non-operating assets, net	(54)	(75)	–28	–14
Total net assets (liabilities)	**(16,124)**	**(21,009)**	**–23**	**–22**
Free cash flow – Treasury and taxation				
Treasury activities	(1,542)	(1,493)	+3	–2
Taxes paid	(3,329)	(2,594)	+28	+25
Dividends paid	(5,888)	(5,742)	+3	+2
Total	**(10,759)**	**(9,829)**	**+9**	**+8**

1) See pages 146–149 for definition of Core results and Core EPS.

Financial income

Financial income was 471 million Swiss francs, a decrease of 30% compared to 2011. Interest income and income from debt securities were 32 million Swiss francs, a decrease of 55% due to the low prevailing interest rates during 2012. The net foreign exchange result reflects hedging costs and was a loss of 89 million Swiss francs compared to a gain of 20 million Swiss francs in 2011. Net income from equity securities was 38 million Swiss francs, down by 44%. Expected returns on pension plan assets were 514 million Swiss francs, which was broadly in line with 2011. A full analysis of financial income is given in Note 4 to the Consolidated Financial Statements.

Financing costs

Financing costs were 2,273 million Swiss francs, a decrease of 2% compared to 2011. The main driver was an 8% decrease in interest expenses which reflects the continued repayment of the debt incurred to finance the Genentech transaction. Financing costs also include 259 million Swiss francs for the loss on the combined repurchase of 975 million euros of notes that were due 4 March 2013, 650 million euros of notes that were due 4 March 2016 and the exercise of the Group's option to call for early redemption of 1.75 billion US dollars of notes that were due 1 March 2014. The comparative period in 2011 contained 172 million Swiss francs for the loss on early redemption of debt. The interest cost of pension plans remained largely stable at 576 million Swiss francs. A full analysis of financing costs is given in Note 4 to the Consolidated Financial Statements.

Income taxes

The Group's effective core tax rate increased by 1.4 percentage points to 22.7% in 2012 (2011: 21.3%). The main reason for the increase of the effective tax rate was the higher percentage core profit contribution from the US, which has a relatively higher local tax rate than the average Group rate.

A tax benefit of 930 million Swiss francs was recorded for the non-core items described above compared to a tax benefit of 554 million Swiss francs in 2011. The increase was primarily due to the higher tax benefit resulting from the global restructuring plans including intangible asset impairments as well as legal and environmental costs as compared to 2011, partially offset by the tax effects of the costs resulting from the 2011 East Japan Earthquake.

Full details of the Group's income tax positions are given in Note 5 to the Consolidated Financial Statements.

Analysis of the Group's effective tax rate

	2012			2011		
	Profit before tax (mCHF)	Income taxes (mCHF)	Tax rate (%)	Profit before tax (mCHF)	Income taxes (mCHF)	Tax rate (%)
Group's effective tax rate – Core basis	**15,358**	**(3,480)**	**22.7**	**13,580**	**(2,895)**	**21.3**
Global restructuring plans	(1,436)	399	27.8	(940)	268	28.5
Intangible assets	(1,242)	354	28.5	(658)	222	33.7
Other	(357)	177	49.6	(97)	64	66.0
Group's effective tax rate – IFRS basis	**12,323**	**(2,550)**	**20.7**	**11,885**	**(2,341)**	**19.7**

Financial position

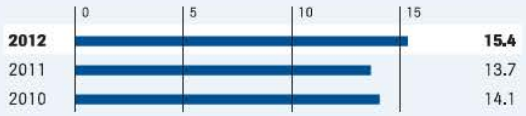
The decrease in the net debt position was due to the increased operating free cash flow which more than offset the higher tax payments and the increase in the annual dividend, as is more fully described in the net debt section below. The increase in net pension liabilities reflects falling interest rates leading to the discounted defined benefit obligation being higher. The net tax assets increased mainly due to the deferred tax effect of the increased net pension liabilities. The net derivative position increased to a net asset of 0.3 billion Swiss francs, mainly due to higher valuations on the cross-currency swaps following a stronger euro compared to the US dollar. Interest payable relates mostly to bonds and notes with coupon payment dates in March and September, and the decline is mostly due to the on-going debt redemptions. At 31 December 2012 the Group held financial long-term assets with a market value of 0.3 billion Swiss francs, which consist mostly of holdings in biotechnology companies which were acquired in the context of licensing transactions or scientific collaborations.

Free cash flow

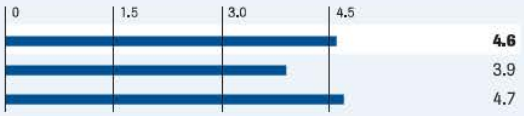
The cash outflow from treasury activities remained stable at 1.5 billion Swiss francs. Total taxes paid were 3.3 billion Swiss francs, an increase of 25% at constant exchange rates. This was due to higher tax payments in the United States and at Chugai and the settlement of certain outstanding tax positions. Total dividends paid were 5.9 billion Swiss francs, an increase of 0.1 billion Swiss francs compared to 2011, reflecting the 3% increase of the Roche Group dividend.

Cash flows and net debt

Operating free cash flow in billions of CHF



Free cash flow in billions of CHF



Free cash flow in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
2012				
Operating profit – IFRS basis	13,677	1,284	(836)	14,125
Operating profit cash adjustments	2,152	1,737	304	4,193
Operating profit, net of operating cash adjustments	**15,829**	**3,021**	**(532)**	**18,318**
(Increase) decrease in net working capital	(488)	(79)	44	(523)
Investments in property, plant and equipment	(1,079)	(1,091)	(1)	(2,171)
Investments in intangible assets	(210)	(25)	–	(235)
Operating free cash flow	**14,052**	**1,826**	**(489)**	**15,389**
Treasury activities				(1,542)
Taxes paid				(3,329)
Dividends paid				(5,888)
Free cash flow				**4,630**
2011				
Operating profit – IFRS basis	12,251	1,656	(453)	13,454
Operating profit cash adjustments	2,286	1,355	9	3,650
Operating profit, net of operating cash adjustments	**14,537**	**3,011**	**(444)**	**17,104**
(Increase) decrease in net working capital	(406)	(765)	5	(1,166)
Investments in property, plant and equipment	(981)	(977)	(1)	(1,959)
Investments in intangible assets	(236)	(10)	–	(246)
Operating free cash flow	**12,914**	**1,259**	**(440)**	**13,733**
Treasury activities				(1,493)
Taxes paid				(2,594)
Dividends paid				(5,742)
Free cash flow				**3,904**

Operating free cash flow increased by 10% at constant exchange rates to 15.4 billion Swiss francs, mainly due to the continued growth of the underlying operating business, which showed an 11% increase in core operating profit. In Pharmaceuticals the strong operating results were partially offset by increases in net working capital and higher investments in property, plant and equipment. Diagnostics operating free cash flow increased significantly due to improved collection of trade receivables and factoring initiatives in Southern European countries.

The cash outflow from treasury activities remained stable at 1.5 billion Swiss francs. Total taxes paid were 3.3 billion Swiss francs, an increase due to higher tax payments in the United States and at Chugai and the settlement of certain outstanding tax positions. Total dividends paid were also higher due to the 3% increase of the annual Roche Group dividend.

Free cash flow of 4.6 billion Swiss francs is 0.7 billion Swiss francs higher than in 2011. The increase was due to the growth in the operating free cash flow partly offset by higher tax and dividend payments.

Net debt in millions of CHF

At 31 December 2011	
Cash and cash equivalents	3,854
Marketable securities	7,433
Long-term debt	(23,459)
Short-term debt	(3,394)
Net debt at beginning of period	**(15,566)**
Change in net debt during 2012	
Free cash flow for 2012	4,630
Transactions in own equity instruments	432
Business combinations, net of divestments of subsidiaries	(28)
Hedging and collateral arrangements	172
Currency translation, fair value and other movements	(239)
Change in net debt during period	**4,967**
At 31 December 2012	
Cash and cash equivalents	4,530
Marketable securities	9,461
Long-term debt	(17,860)
Short-term debt	(6,730)
Net debt at end of period	**(10,599)**

Net debt – currency profile in millions of CHF

	Cash and marketable securities		Debt	
	2012	2011	2012	2011
US dollar [1]	2,757	1,102	(19,748)	(24,896)
Euro	3,787	2,133	(1,210)	(8)
Swiss franc	4,041	5,351	(2,977)	(1,484)
Japanese yen	2,117	2,080	(1)	–
Pound sterling	794	262	(292)	(287)
Other	495	359	(362)	(178)
Total	**13,991**	**11,287**	**(24,590)**	**(26,853)**

1) US dollar-denominated debt includes those bonds and notes denominated in euros, Swiss francs and pounds sterling that were swapped into US dollars, and therefore in the financial statements have economic characteristics equivalent to US dollar-denominated bonds and notes.

The net debt position of the Group at 31 December 2012 was 10.6 billion Swiss francs, a decrease of 5.0 billion Swiss francs from 31 December 2011. The decrease in net debt was mainly due to the free cash flow of 4.6 billion Swiss francs described above.

When issuing the debt to finance the Genentech transaction, the Group entered into derivative contracts with third parties to hedge the foreign exchange risk arising from bonds and notes issued in currencies other than US dollar. The total exposure hedged at issuance of these bonds and notes was approximately 25 billion Swiss francs. Collateral agreements were entered with the derivative counterparties to mitigate counterparty risk. During 2012 cash collateral of 0.2 billion Swiss francs was delivered to Roche. This increased the cash collateral balance of 0.2 billion Swiss francs at the start of the year to 0.4 billion Swiss francs at 31 December 2012. The collateral balance in relation to the hedges on the non-US dollar-denominated bonds and notes is mainly sensitive to the foreign exchange rate between the US dollar and the euro, but also to pound sterling. Currently the collateral balance moves by approximately 90 million US dollars if all of these foreign exchange rates move by 1% simultaneously. Collateral volatility will decrease to less than 50 million US dollars for each 1% movement in foreign exchange rates by mid-2013 as a significant portion of the non-US dollar-denominated bonds and notes will have been repaid by this time.

The redemption and repurchase of bonds and notes and also the issuance of new bonds and notes during 2012, as described in Note 26 to the Consolidated Financial Statements, had a direct impact on liquid funds. However, this had no material impact on the net debt position.

Full details of the Group's marketable securities, cash and debt positions are given in Notes 19, 20 and 26 to the Consolidated Financial Statements.

Pensions and other post-employment benefits

Post-employment benefit plans are classified as 'defined contribution plans' if the Group pays fixed contributions into a separate fund or to a third-party financial institution and will have no further legal or constructive obligation to pay further contributions. In 2012 expenses for the Group's defined contribution plans were 313 million Swiss francs (2011: 303 million Swiss francs).

All other plans are classified as 'defined benefit plans', even if the Group's potential obligation is minor or has a relatively remote possibility of arising. The funding and asset management of the Group's various defined benefit plans is overseen at a corporate level. Plans are usually established as trusts independent of the Group and are funded by payments from the Group and by employees, but in some cases the plan is unfunded and the Group pays pensions to retired employees directly from its own financial resources.

Funding status and balance sheet position

	2012 (mCHF)	2011 (mCHF)
Funded plans		
– Fair value of plan assets	11,214	10,622
– Defined benefit obligation	(13,824)	(12,428)
– Over (under) funding	**(2,610)**	**(1,806)**
Unfunded plans		
– Defined benefit obligation	(4,090)	(3,249)
Total funding status	**(6,700)**	**(5,055)**
Unrecognised past service costs	(20)	(24)
Limit on asset recognition	(7)	(10)
Reimbursement rights	142	137
Net recognised asset (liability)	**(6,585)**	**(4,952)**

Funding status. Overall the funding status on an IFRS basis of the Group's defined benefit plans decreased to 81% compared to 85% at the start of the year. This decrease came mainly from an increase in the defined benefit obligation arising from a fall in discount rates in comparison to the end of 2011. Plan assets increased, with company contributions increasing to 307 million Swiss francs in 2012, compared to 293 million Swiss francs in 2011. The Group continues to closely monitor the funded status of its major pension funds. In addition to cash injections, the Group has initiated plan changes in several local pension plans, with, for example, some of the major pension funds removing early retirement incentives. The Group continues to introduce more flexible retirement models to better accommodate the diverse needs of an ageing workforce.

Expenses recorded in income statement. Total pension expenses in 2012 relating to the Group's defined benefit plans were 342 million Swiss francs compared to 399 million Swiss francs in 2011. The decrease of 14% is primarily due to higher curtailment gains of 76 million Swiss francs related to Nutley restructuring compared to 15 million Swiss francs of curtailment gains in 2011. Based on the revised actuarial assumptions at the end of 2012, total pension expenses for 2013 are expected to be approximately 240 million Swiss francs higher than 2012. The increase is mainly driven by application of IAS 19 (revised), which will increase the net interest cost of pensions by approximately 160 million Swiss francs. There will also be an increase of approximately 75 million Swiss francs in the current service cost driven by a fall in the discount rates during 2012. These estimates for 2013 pension expenses do not include any curtailment or past service effects that might arise during the year.

Full details of the Group's pensions and other post-employment benefits are given in Note 9 to the Consolidated Financial Statements.

Roche shares

Share price and market capitalisation (at 31 December)

	2012	2011	% change (CHF)
Share price (CHF)	186.90	166.60	+12
Non-voting equity security *(Genussschein)* price (CHF)	184.00	159.20	+16
Market capitalisation (billions of CHF)	157	136	+15

In 2012 Roche ranked number 5 among a peer group of 16 healthcare companies[1] for Total Shareholder Return (TSR), defined as share price growth plus dividends, measured in Swiss francs at actual exchange rates. At constant exchange rates Roche ranked number 8, with the year-end return being 17% for Roche shares and 21% for Roche non-voting equity securities. The combined performance of share and non-voting equity security was 20% compared to a weighted average return for the peer group of 16% in Swiss franc terms and 18% at constant exchange rates.

Share prices in healthcare outperformed many other sectors in 2012 despite the continuing pressure on healthcare prices and sovereign debt issues in Europe and the USA. The good Roche news flow was rewarded by a relatively strong share price performance.

1) Peer group for 2012: Abbott Laboratories, Amgen, Astellas, AstraZeneca, Bayer, Becton Dickinson, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck & Co,. Novartis, Pfizer, Roche, Sanofi-Aventis and Takeda.

Total Shareholder Return development in %

Proposed dividend

The Board of Directors is proposing an increase of 8% in the dividend for 2012 to 7.35 Swiss francs per share and non-voting equity security (2011: 6.80 Swiss francs) for approval at the Annual General Meeting. This is the 26th consecutive increase in the dividend. If the dividend proposal is approved by shareholders, dividend payments on the total shares and non-voting equity securities will amount to 6.3 billion Swiss francs (2011: 5.9 billion Swiss francs), resulting in a pay-out ratio (based on core net income) of 54.0% (2011: 55.3%). Based on the prices at year-end 2012, the dividend yield on the Roche share is 3.9% (2011: 4.1%) and the yield on the non-voting equity security is 4.0% (2011: 4.3%). Further information on the Roche securities is given on pages 152–153 of the Finance Report.

Information per share and non-voting equity security

	2012 (CHF)	2011 (CHF)	% change (CHF)
Basic EPS	11.25	11.01	+2
Diluted EPS	11.16	10.98	+2
Core EPS	13.62	12.30	+11
Equity attributable to Roche shareholders per share	17.08	14.27	+20
Dividend per share	7.35	6.80	+8

For further details please refer to Notes 27 and 28 of the Consolidated Financial Statements and pages 149 and 153 of the Finance Report. The pay-out ratio is calculated as dividend per share divided by core earnings per share.

Debt

To finance the Genentech transaction, the Group issued bonds and notes equivalent to 48.2 billion Swiss francs in February and March 2009. Of the debt raised in early 2009, 52% had already been repaid by 31 December 2012. This includes the redemption of 2.2 billion Swiss franc-denominated notes on the due date of 23 March 2012, 0.8 billion euros of notes originally due 4 March 2013 that were repurchased on 23 March 2012 following a tender offer, 0.2 billion euros of notes originally due 4 March 2013 that were repurchased on 30 November 2012 following a tender offer and 0.65 billion euros of notes originally due 4 March 2016 that were repurchased on 30 November 2012 following a tender offer. Furthermore on 20 December 2012 the Group exercised its option to call for early redemption of 1.75 billion US dollars of notes that were due 1 March 2014. These notes will be repaid on 21 March 2013.

In 2012 the Group issued a total of 1.5 billion Swiss francs of notes that will be due in 2013, 2018, and 2022 and also issued 1.0 billion euros of notes due in 2018. These bonds have coupons between 0.3% and 2.0% and were issued to partly refinance debt redemptions in an attractive market environment.

The maturity schedule of the Group's bonds and notes outstanding at 31 December 2012 is shown in the table below, which includes those instruments that were already in issue prior to the Genentech transaction.

Bonds and notes: nominal amounts at 31 December 2012 by contractual maturity

	US dollar (mUSD)	Euro (mEUR)	Pound sterling (mGBP)	Swiss franc (mCHF)	Total [1] (mUSD)	Total [1] (mCHF)
2013	1,750[2]	3,313[3]	–	400	6,567	5,998
2014	–	–	–	–	–	–
2015	1,000	–	900[4]	–	2,455	2,243
2016	–	2,100[3]	–	–	2,775	2,535
2017	–	–	–	1,500	1,642	1,500
2018–2022	4,500	2,750[3]	–	1,100	9,339	8,530
2023 and beyond	3,000	–	200	–	3,323	3,036
Total	**10,250**	**8,163**	**1,100**	**3,000**	**26,101**	**23,842**

1) Total translated at 31 December 2012 exchange rates.
2) Following the Group's exercise of its early call option in December 2012 the bond will be redeemed in March 2013, one year ahead of its contractual maturity.
3) Of the proceeds from these bonds and notes, 6.25 billion euros have been swapped into US dollars, and therefore in the financial statements these have economic characteristics equivalent to US dollar-denominated bonds and notes.
4) Of the proceeds from these bonds and notes, 600 million pounds sterling have been swapped into US dollars, and therefore in the financial statements these have economic characteristics equivalent to US dollar-denominated bonds and notes.

The Group plans to meet its debt obligations using existing liquid funds as well as cash generated from business operations. In the full year 2012 the free cash flow was 4.6 billion Swiss francs, which included the cash generated from operations, as well as payment of interest, tax and dividends.

For short-term financing requirements, the Group has a commercial paper programme in the United States under which it can issue up to 7.5 billion US dollars of unsecured commercial paper notes and committed credit lines of 3.9 billion euros available as back-stop lines. Commercial paper notes totalling 0.3 billion US dollars were outstanding as of 31 December 2012. For longer-term financing the Group maintains strong long-term investment-grade credit ratings of A1 by Moody's and AA by Standard & Poor's which should facilitate efficient access to international capital markets.

Credit ratings for the Roche Group at 31 December 2012

	Short-term	Long-term	Outlook
Moody's	P-1	A1	Stable
Standard & Poor's	A-1+	AA	Stable

As described above in the commentary on the net debt position, in 2009 the Group entered into derivative contracts with third parties to hedge the foreign exchange risk arising from bonds and notes issued in currencies other than US dollar. At the same time collateral agreements were entered with the derivative counterparties to mitigate counterparty risk.

Financial risks

As at 31 December 2012 the Group has a net debt position of 10.6 billion Swiss francs (31 December 2011: 15.6 billion Swiss francs). The financial assets of the Group are managed in a conservative way with the objective to meet the Group's financial obligations at all times.

Asset allocation. A considerable portion of the cash and marketable securities the Group currently holds is being used for debt redemptions. Liquid funds are either held as cash or are invested in high-quality, investment-grade fixed income securities with an investment horizon to meet those liquidity requirements.

Cash and marketable securities

	2012 (mCHF)	2012 (% of total)	2011 (mCHF)	2011 (% of total)
Cash and cash equivalents	4,530	32	3,854	34
Money market instruments	7,631	55	5,764	51
Bonds, debentures and other investments	1,558	11	1,428	13
Shares	272	2	241	2
Total cash and marketable securities	**13,991**	**100**	**11,287**	**100**

Credit risk. Credit risk arises from the possibility that counterparties to transactions may default on their obligations causing financial losses for the Group. The rating profile of the Group's 13.7 billion Swiss francs cash and fixed income marketable securities remained strong with more than 99% being invested in the A-AAA range. As noted previously the Group has signed netting and collateral agreements with the counterparties in order to mitigate counterparty risk on derivative positions.

At 31 December 2012 the Group has trade receivables of 10.1 billion Swiss francs. Since the beginning of 2010 there have been increasing financial difficulties in certain Southern European countries, notably Spain, Italy, Portugal and Greece. The Group is a leading supplier in these countries and has trade receivables of 1.5 billion Swiss francs with the public customers in these countries. The Group uses different measures to improve collections in these countries, including intense communication with customers, negotiations of payment plans, charging of interest for late payments, and legal action. The Group is also applying new commercial arrangements to some public hospitals in Greece and Portugal.

Liquidity risk. Liquidity risk arises through a surplus of financial obligations over available financial assets due at any point in time. The Group's approach to liquidity risk is to maintain sufficient readily available reserves in order to meet its liquidity requirements at any point in time. In addition to the current liquidity position the Group has strong cash generation ability. Those future cash flows will be used to repay debt instruments in the coming years.

Despite total debt of 24.6 billion Swiss francs at 31 December 2012, Roche enjoys strong long-term investment-grade credit ratings of A1 by Moody's and AA by Standard & Poor's. At the same time Roche is rated at the highest available short-term ratings by those agencies. In the event of financing requirements, the ratings and the strong credit of Roche should permit efficient access to international capital markets, including the commercial paper market. The Group has committed credit lines with various financial institutions totalling 5.1 billion Swiss francs of which 4.7 billion Swiss francs serve as back-stop line for the commercial paper programme. As at 31 December 2012 no debt has been drawn under these credit lines.

Market risk. Market risk arises from changing market prices of the Group's financial assets or financial liabilities. The exposures are predominantly related to changes in interest rates, foreign exchange rates and equity prices. The Group uses Value-at-Risk (VaR) to assess the impact of market risk on its financial instruments. VaR data indicates the value range within which a given financial instrument will fluctuate with a pre-set probability as a result of movements in market prices. The VaR data in the table below indicates the economic loss level over a period of one month which with 95% probability will not be exceeded. Actual future economic gains and losses associated with our treasury activities may differ materially from the VaR analyses performed due to the inherent limitations associated with predicting the timing and amount of changes to interest rates, foreign currency exchanges rates and equity investment prices, particularly in periods of high market volatilities. Furthermore, the VaR numbers below do not include a credit risk component.

Market risk of financial instruments

	31 December 2012 (mCHF)	31 December 2011 (mCHF)
VaR – Interest rate component	191	301
VaR – Foreign exchange component	50	49
VaR – Other price component	31	35
Diversification	(67)	(69)
VaR – Total	**205**	**316**

The interest rate VaR decreased reflecting the ageing of debt and the repayment of debt during 2012. As all issued debt is held at amortised cost, the interest rate VaR is a sole metric for economic fair value changes, but there is no impact on the carrying value or profit and loss of the Group. The foreign exchange VaR remained stable. Other price risk arises mainly from movements in the prices of equity securities and remained largely stable. At 31 December 2012 the Group held equity securities with a market value of 0.5 billion Swiss francs. This includes holdings in biotechnology companies which were acquired in the context of licensing transactions or scientific collaborations.

Further information on financial risk management and financial risks and the VaR methodology is included in Note 31 to the Consolidated Financial Statements.

International Financial Reporting Standards

The Roche Group has been using International Financial Reporting Standards (IFRS) to report its consolidated results since 1990. In 2012 the Group has implemented various minor amendments to existing standards and interpretations, which have no material impact on the Group's overall results and financial position. Various new standards have been issued, as described in Note 1 to the Consolidated Financial Statements, which should be implemented at the latest by 2013. Except as noted below, based on the analysis to date, the Group does not anticipate that these will have a material impact on the Group's overall results and financial position.

Amongst other matters the revised version of IAS 19 'Employee Benefits' includes the following changes to the existing standard:

- Eliminating the option to defer the recognition of actuarial gains and losses from defined benefit post-employment plans, known as the 'corridor method'. The Group does not currently apply this option, but rather uses the option to recognise such gains and losses in other comprehensive income. The option currently applied by the Group will henceforth be a requirement under the revised standard and therefore this change will have no impact on the Group's financial statements.
- The current method of including the expected income from plan assets at an estimated asset return would be replaced by using the discount rate that is used to discount the defined benefit obligation. The Group estimates that, had this method been applied to the 2012 Consolidated Financial Statements, net financial income would have been approximately 161 million Swiss francs lower than that published. Operating profit would not have been materially affected.

Roche Group
Consolidated Financial Statements

Reference numbers indicate corresponding Notes to the Consolidated Financial Statements.

Roche Group consolidated income statement for the year ended 31 December 2012 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2]	**35,232**	**10,267**	**–**	**45,499**
Royalties and other operating income [2]	1,794	151	–	1,945
Cost of sales	(7,348)	(4,827)	–	(12,175)
Marketing and distribution	(5,914)	(2,625)	–	(8,539)
Research and development [2]	(8,529)	(1,023)	–	(9,552)
General and administration	(1,558)	(659)	(836)	(3,053)
Operating profit [2]	**13,677**	**1,284**	**(836)**	**14,125**
Associates [14]				–
Financial income [4]				471
Financing costs [4]				(2,273)
Profit before taxes				**12,323**
Income taxes [5]				(2,550)
Net income				**9,773**
Attributable to				
– Roche shareholders [27]				9,539
– Non-controlling interests [29]				234
Earnings per share and non-voting equity security [28]				
Basic (CHF)				11.25
Diluted (CHF)				11.16

Roche Group consolidated income statement for the year ended 31 December 2011 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2]	**32,794**	**9,737**	**–**	**42,531**
Royalties and other operating income [2]	1,453	129	–	1,582
Cost of sales	(7,436)	(4,506)	–	(11,942)
Marketing and distribution	(5,636)	(2,413)	–	(8,049)
Research and development [2]	(7,397)	(929)	–	(8,326)
General and administration	(1,527)	(362)	(453)	(2,342)
Operating profit [2]	**12,251**	**1,656**	**(453)**	**13,454**
Associates [14]				12
Financial income [4]				647
Financing costs [4]				(2,228)
Profit before taxes				**11,885**
Income taxes [5]				(2,341)
Net income				**9,544**
Attributable to				
– Roche shareholders [27]				9,343
– Non-controlling interests [29]				201
Earnings per share and non-voting equity security [28]				
Basic (CHF)				11.01
Diluted (CHF)				10.98

Roche Group consolidated statement of comprehensive income in millions of CHF

	Year ended 31 December 2012	2011
Net income recognised in income statement	**9,773**	**9,544**
Other comprehensive income		
Available-for-sale investments [27]	(2)	(52)
Cash flow hedges [27]	61	72
Currency translation of foreign operations [27]	(693)	7
Defined benefit post-employment plans [27]	(1,314)	(840)
Other comprehensive income, net of tax	**(1,948)**	**(813)**
Total comprehensive income	**7,825**	**8,731**
Attributable to		
– Roche shareholders [27]	7,864	8,418
– Non-controlling interests [29]	(39)	313
Total	**7,825**	**8,731**

Roche Group consolidated balance sheet in millions of CHF

	31 December 2012	31 December 2011	31 December 2010
Non-current assets			
Property, plant and equipment [11]	15,402	16,201	16,729
Goodwill [12]	7,480	7,843	7,722
Intangible assets [13]	4,214	5,126	5,133
Associates [14]	24	24	13
Financial long-term assets [15]	339	360	428
Other long-term assets [15]	451	460	456
Deferred income tax assets [5]	4,856	2,762	2,368
Post-employment benefit assets [9]	668	568	559
Total non-current assets	**33,434**	**33,344**	**33,408**
Current assets			
Inventories [16]	5,542	5,060	4,972
Accounts receivable [17]	9,465	9,799	9,403
Current income tax assets [5]	339	222	168
Other current assets [18]	2,034	1,864	2,168
Marketable securities [19]	9,461	7,433	9,060
Cash and cash equivalents [20]	4,530	3,854	1,841
Total current assets	**31,371**	**28,232**	**27,612**
Total assets	**64,805**	**61,576**	**61,020**
Non-current liabilities			
Long-term debt [26]	(17,860)	(23,459)	(27,857)
Deferred income tax liabilities [5]	(1,394)	(604)	(885)
Post-employment benefit liabilities [9]	(7,253)	(5,520)	(4,367)
Provisions [24]	(1,042)	(991)	(934)
Other non-current liabilities [25]	(319)	(310)	(337)
Total non-current liabilities	**(27,868)**	**(30,884)**	**(34,380)**
Current liabilities			
Short-term debt [26]	(6,730)	(3,394)	(2,201)
Current income tax liabilities [5]	(2,210)	(2,206)	(2,037)
Provisions [24]	(2,158)	(1,742)	(2,146)
Accounts payable [21]	(1,945)	(2,053)	(2,068)
Accrued and other current liabilities [22]	(7,166)	(6,815)	(6,526)
Total current liabilities	**(20,209)**	**(16,210)**	**(14,978)**
Total liabilities	**(48,077)**	**(47,094)**	**(49,358)**
Total net assets	**16,728**	**14,482**	**11,662**
Equity			
Capital and reserves attributable to Roche shareholders [27]	14,494	12,095	9,469
Equity attributable to non-controlling interests [29]	2,234	2,387	2,193
Total equity	**16,728**	**14,482**	**11,662**

Roche Group consolidated statement of cash flows in millions of CHF

	Year ended 31 December 2012	2011
Cash flows from operating activities		
Cash generated from operations [30]	19,984	18,038
(Increase) decrease in working capital	(523)	(1,166)
Payments made for defined benefit post-employment plans [9]	(439)	(430)
Utilisation of provisions [24]	(828)	(948)
Disposal of products	138	50
Other operating cash flows	2	4
Cash flows from operating activities, before income taxes paid	**18,334**	**15,548**
Income taxes paid	(3,329)	(2,594)
Total cash flows from operating activities	**15,005**	**12,954**
Cash flows from investing activities		
Purchase of property, plant and equipment	(2,171)	(1,959)
Purchase of intangible assets	(235)	(246)
Disposal of property, plant and equipment	107	349
Disposal of intangible assets	–	–
Business combinations [6]	(36)	(451)
Divestment of subsidiaries [33]	8	(19)
Interest and dividends received [30]	39	42
Sales of marketable securities	40,934	32,790
Purchases of marketable securities	(43,158)	(30,808)
Other investing cash flows	(2)	(51)
Total cash flows from investing activities	**(4,514)**	**(353)**
Cash flows from financing activities		
Proceeds from issue of bonds and notes [26]	2,698	–
Redemption and repurchase of bonds and notes [26]	(4,326)	(4,019)
Increase (decrease) in commercial paper [26]	(687)	808
Increase (decrease) in other debt [26]	153	19
Hedging and collateral arrangements [26]	172	338
Equity contribution by non-controlling interests	1	–
Interest paid	(1,514)	(1,550)
Dividends paid	(5,888)	(5,742)
Equity-settled equity compensation plans, net of transactions in own equity instruments [10]	(302)	(578)
Other financing cash flows	(1)	–
Total cash flows from financing activities	**(9,694)**	**(10,724)**
Net effect of currency translation on cash and cash equivalents	(121)	136
Increase (decrease) in cash and cash equivalents	**676**	**2,013**
Cash and cash equivalents at 1 January	3,854	1,841
Cash and cash equivalents at 31 December [20]	**4,530**	**3,854**

Roche Group consolidated statement of changes in equity in millions of CHF

	Share capital	Retained earnings	Fair value reserves	Hedging reserves	Translation reserves	Total	Non-controlling interests	Total equity
Year ended 31 December 2011								
At 1 January 2011	**160**	**14,550**	**174**	**(103)**	**(5,312)**	**9,469**	**2,193**	**11,662**
Net income recognised in income statement	–	9,343	–	–	–	9,343	201	9,544
Available-for-sale investments	–	–	(50)	–	–	(50)	(2)	(52)
Cash flow hedges	–	–	–	72	–	72	–	72
Currency translation of foreign operations	–	–	–	11	(122)	(111)	118	7
Defined benefit post-employment plans	–	(836)	–	–	–	(836)	(4)	(840)
Total comprehensive income	**–**	**8,507**	**(50)**	**83**	**(122)**	**8,418**	**313**	**8,731**
Dividends	–	(5,614)	–	–	–	(5,614)	(120)	(5,734)
Equity compensation plans, net of transactions in own equity instruments	–	(178)	–	–	–	(178)	1	(177)
Changes in non-controlling interests	–	–	–	–	–	–	–	–
At 31 December 2011	**160**	**17,265**	**124**	**(20)**	**(5,434)**	**12,095**	**2,387**	**14,482**
Year ended 31 December 2012								
At 1 January 2012	**160**	**17,265**	**124**	**(20)**	**(5,434)**	**12,095**	**2,387**	**14,482**
Net income recognised in income statement	–	9,539	–	–	–	9,539	234	9,773
Available-for-sale investments	–	–	(6)	–	–	(6)	4	(2)
Cash flow hedges	–	–	–	61	–	61	–	61
Currency translation of foreign operations	–	–	(5)	(1)	(405)	(411)	(282)	(693)
Defined benefit post-employment plans	–	(1,319)	–	–	–	(1,319)	5	(1,314)
Total comprehensive income	**–**	**8,220**	**(11)**	**60**	**(405)**	**7,864**	**(39)**	**7,825**
Dividends	–	(5,770)	–	–	–	(5,770)	(116)	(5,886)
Equity compensation plans, net of transactions in own equity instruments	–	305	–	–	–	305	1	306
Changes in non-controlling interests	–	–	–	–	–	–	–	–
Equity contribution by non-controlling interests	–	–	–	–	–	–	1	1
At 31 December 2012	**160**	**20,020**	**113**	**40**	**(5,839)**	**14,494**	**2,234**	**16,728**

Notes to the Roche Group Consolidated Financial Statements

Reference numbers indicate corresponding Notes to the Consolidated Financial Statements.

1. Summary of significant accounting policies

Basis of preparation of the consolidated financial statements

The consolidated financial statements (hereafter 'the Annual Financial Statements') of the Roche Group have been prepared in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law. They have been prepared using the historical cost convention except that, as disclosed in the accounting policies below, certain items, including derivatives and available-for-sale investments, are shown at fair value. They were approved for issue by the Board of Directors on 28 January 2013 and are subject to approval by the Annual General Meeting of shareholders on 5 March 2013.

The preparation of the Annual Financial Statements requires management to make estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities at the date of the financial statements. If in the future such estimates and assumptions, which are based on management's best judgement at the date of the financial statements, deviate from the actual circumstances, the original estimates and assumptions will be modified as appropriate in the year in which the circumstances change.

Consolidation policy

These financial statements are the Annual Financial Statements of Roche Holding Ltd, a company registered in Switzerland, and its subsidiaries ('the Group').

The subsidiaries are those companies controlled, directly or indirectly, by Roche Holding Ltd, where control is defined as the power to govern the financial and operating policies of an enterprise so as to obtain benefits from its activities. This control is normally evidenced when Roche Holding Ltd owns, either directly or indirectly, more than 50% of the voting rights or currently exercisable potential voting rights of a company's share capital. Special Purpose Entities are consolidated where the substance of the relationship is that the Special Purpose Entity is controlled by the Group. Companies acquired during the year are consolidated from the date on which control is transferred to the Group, and subsidiaries to be divested are included up to the date on which control passes from the Group. Inter-company balances, transactions and resulting unrealised income are eliminated in full. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control.

Investments in associates are accounted for using the equity method. These are companies over which the Group exercises, or has the power to exercise, significant influence, but which it does not control. This is normally evidenced when the Group owns 20% or more of the voting rights or currently exercisable potential voting rights of the company. Balances and transactions with associates that result in unrealised income are eliminated to the extent of the Group's interest in the associate. Interests in joint ventures are reported using the line-by-line proportionate consolidation method.

Segment reporting

For the purpose of segment reporting the Group's Corporate Executive Committee (CEC) is considered to be the Group's Chief Operating Decision Maker. The determination of the Group's operating segments is based on the organisation units for which information is reported to the CEC on a regular basis. The information provided is used as the basis of the segment revenue and profit disclosures reported in Note 2, with the geographic analysis based on the location of customers. Selected segment balance sheet information is also routinely provided to the CEC. The Group has two divisions, Pharmaceuticals and Diagnostics. Revenues are primarily generated from the sale of prescription pharmaceutical products and diagnostic instruments, reagents and consumables, respectively. Both divisions also derive revenues from the sale or licensing of products or technology to third parties. Residual operating activities from divested businesses and certain global activities are reported as 'Corporate'. These include the CEC and global group functions for communications, human resources, finance (including treasury, taxes and pension fund management), legal, safety and environmental services. Sub-divisional information for Roche Pharmaceuticals and Chugai, operating segments within the Pharmaceuticals Division, is also presented.

Transfer prices between operating segments are set on an arm's length basis. Operating assets and liabilities consist of property, plant and equipment, goodwill and intangible assets, trade receivables/payables, inventories and other assets and liabilities, such as provisions, which can be reasonably attributed to the reported operating segments. Non-operating assets and liabilities mainly include current and deferred income tax balances, post-employment benefit assets/liabilities and financial assets/liabilities such as cash, marketable securities, investments and debt.

Foreign currency translation

Most Group companies use their local currency as their functional currency. Certain Group companies use other currencies (such as US dollars, Swiss francs or euros) as their functional currency where this is the currency of the primary economic environment in which the entity operates. Local transactions in other currencies are initially reported using the exchange rate at the date of the transaction. Gains and losses from the settlement of such transactions and gains and losses on translation of monetary assets and liabilities denominated in other currencies are included in income, except when they are qualifying cash flow hedges or arise on monetary items that, in substance, form part of the Group's net investment in a foreign entity. In such cases the gains and losses are deferred into other comprehensive income.

Upon consolidation, assets and liabilities of Group companies using functional currencies other than Swiss francs (foreign entities) are translated into Swiss francs using year-end rates of exchange. Sales, costs, expenses, net income and cash flows are translated at the average rates of exchange for the year. Translation differences due to the changes in exchange rates between the beginning and the end of the year and the difference between net income translated at the average and year-end exchange rates are taken directly to other comprehensive income. On disposal of a foreign entity, the identified cumulative currency translation differences within other comprehensive income relating to that foreign entity are recognised in income as part of the gain or loss on divestment.

Revenues

Sales represent amounts received and receivable for goods supplied to customers after deducting trade discounts, cash discounts and volume rebates, and exclude value added taxes and other taxes directly linked to sales. Revenues from the sale of products are recognised upon transfer to the customer of significant risks and rewards. Trade discounts, cash discounts and volume rebates are recorded on an accrual basis consistent with the recognition of the related sales. Estimates of expected sales returns, charge-backs and other rebates, including Medicaid in the United States and similar rebates in other countries, are also deducted from sales and recorded as accrued liabilities or provisions or as a deduction from accounts receivable. Such estimates are based on analyses of existing contractual or legislatively mandated obligations, historical trends and the Group's experience. If the circumstances are such that the level of sales returns, and hence revenues, cannot be reliably measured, then sales are only recognised when the right of return expires, which is generally upon prescription of the products to patients. Other revenues are recorded as earned or as the services are performed. Where necessary, single transactions are split into separately identifiable components to reflect the substance of the transaction. Conversely, two or more transactions may be considered together for revenue recognition purposes, where the commercial effect cannot be understood without reference to the series of transactions as a whole.

Cost of sales

Cost of sales includes the corresponding direct production costs and related production overheads of goods sold and services rendered. Royalties, alliance and collaboration expenses, including all collaboration profit-sharing arrangements are also reported as part of cost of sales. Start-up costs between validation and the achievement of normal production capacity are expensed as incurred.

Research and development

Internal research costs are those costs incurred for the purpose of gaining new scientific or technical knowledge and understanding. These costs are expensed as incurred.

Internal development costs are those costs incurred for the application of research findings or other knowledge to plan and develop new products for commercial production. Such costs would qualify for capitalisation as intangible assets only if all of the following criteria can be demonstrated:

- The technical feasibility of completing the development project successfully so that it will be available for use or sale.
- The intention to complete the development project.
- The ability to use or sell the results of the development project.
- That the development project would generate economic benefits. This would normally be evidenced by the existence and size of a market for the results of the project itself or the products that would result from the project.
- The availability of adequate technical, financial and other resources to complete the development project.
- The ability to measure the development expenditure reliably that would qualify for capitalisation as an intangible asset.

The development projects undertaken by the Group are subject to technical, regulatory and other uncertainties, such that, in the opinion of management, the criteria for capitalisation are not met prior to obtaining marketing approval by the regulatory authorities in major markets. Internal development costs that do not meet these criteria are therefore expensed as incurred.

Post-marketing studies after regulatory approval, such as phase IV costs in the pharmaceuticals business, are expensed as incurred. They generally involve safety surveillance and on-going technical support of a drug after it receives marketing approval to be sold. They may be required by regulatory authorities or may be undertaken for safety or commercial reasons. The safety surveillance is designed to detect any rare or long-term adverse effects over a much larger patient population and longer time period than was possible during earlier stages of development. The costs of such post-marketing studies are not capitalised as intangible assets, as in the opinion of management, they do not generate separately identifiable incremental future economic benefits that can be reliably measured.

In addition to its internal research and development activities, the Group is also party to in-licensing and similar arrangements with its alliance partners. The Group may also acquire in-process research and development assets, either through business combinations or through purchases of specific assets.

In-process research and development resources acquired either through in-licensing arrangements, business combinations or separate purchases are capitalised as intangible assets if they are controlled by the Group, are separately identifiable and are expected to generate future economic benefits, even if uncertainty exists as to whether the research and development will ultimately result in a marketable product. Consequently, upfront and milestone payments to third parties for pharmaceutical products or compounds before regulatory marketing approval are recognised as intangible assets. Assets acquired through such arrangements are measured on the basis set out below in the 'Intangible assets' policy and are reviewed for impairment as set out below in the 'Impairment of property, plant and equipment and intangible assets' policy. Subsequent internal research and development costs incurred post-acquisition are treated in the same way as other internal research and development costs. Once available for use, intangible assets are amortised on a straight-line basis over the period of the expected benefit and are reviewed for impairment at each reporting date. If research and development are embedded in contracts for strategic alliances, the Group carefully assesses whether upfront or milestone payments constitute funding of research and development work or acquisition of an asset.

Licensing, milestone and other upfront receipts

Royalty income is recognised on an accrual basis in accordance with the substance of the respective licensing agreements. If the collectability of a royalty amount is not reasonably assured, those royalties are recognised as revenue when the cash is received. Certain Group companies receive upfront, milestone and other similar payments from third parties relating to the sale or licensing of products or technology. Revenue associated with performance milestones is recognised based on achievement of the deliverables as defined in the respective agreements. Upfront payments and licence fees for which there are subsequent deliverables are initially reported as deferred income and are recognised in income as earned over the period of the development collaboration or the manufacturing obligation.

Employee benefits

Wages, salaries, social security contributions, paid annual leave and sick leave, bonuses, and non-monetary benefits are accrued in the year in which the associated services are rendered by employees of the Group. Where the Group provides long-term employee benefits, the cost is accrued to match the rendering of the services by the employees concerned. Liabilities for long-term employee benefits are discounted to take into account the time value of money, where material.

Pensions and other post-employment benefits

Most employees are covered by defined benefit and defined contribution post-employment plans sponsored by Group companies. The Group's contributions to defined contribution plans are charged to the appropriate income statement heading within the operating results in the year to which they relate. The accounting and reporting of defined benefit plans are based on recent actuarial valuations. The defined benefit obligations and service costs are calculated using the projected unit credit method. This reflects service rendered by employees to the dates of valuation and incorporates actuarial assumptions primarily regarding discount rates used in determining the present value of benefits, projected rates of remuneration growth and long-term expected rates of return for plan assets. Discount rates are based on the market yields of high-quality corporate bonds or government bonds in countries where there is not a deep market in corporate bonds. Past service costs are allocated over the average period until the benefits become vested. Current and past service costs are charged to the appropriate income statement heading within the operating results. Pension plan administration and funding is overseen at a corporate level and any settlement gains and losses resulting from changes in funding arrangements are reported as general and administration expenses within the 'Corporate' segment. The expected returns on plan assets and interest costs are charged to financial income and financing costs, respectively. Actuarial gains and losses, which consist of differences between assumptions and actual experiences and the effects of changes in actuarial assumptions, are recorded directly in other comprehensive income. Pension assets and liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan. The recognition of pension assets is limited to the total of the present value of any future refunds from the plans or reductions in future contributions to the plans and any cumulative unrecognised past service costs. Adjustments arising from the limit on the recognition of assets for defined benefit plans are recorded directly in other comprehensive income.

Equity compensation plans

Certain employees of the Group participate in equity compensation plans, including separate plans at Chugai. The fair value of all equity compensation awards granted to employees is estimated at the grant date and recorded as an expense over the vesting period. The expense is charged to the appropriate income statement heading within the operating results. For equity-settled plans, an increase in equity is recorded for this expense and any subsequent cash flows from exercises of vested awards are recorded as changes in equity. For cash-settled plans, a liability is recorded, which is measured at fair value at each reporting date with any movements in fair value being recorded to the appropriate income statement heading within the operating results. Any subsequent cash flows from exercise of vested awards are recorded as a reduction of the liability.

Property, plant and equipment

Property, plant and equipment are initially recorded at cost of purchase or construction, and include all costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These include items such as costs of site preparation, installation and assembly costs and professional fees. The net costs of testing whether the asset is functioning properly, including validation costs, are also included in the initially recorded cost of construction. Interest and other borrowing costs incurred with respect to qualifying assets are capitalised and included in the carrying value of the assets.

Property, plant and equipment are depreciated on a straight-line basis, except for land, which is not depreciated. The estimated useful lives of major classes of depreciable assets are as follows:

Land improvements	40 years
Buildings	10–50 years
Machinery and equipment	4–15 years
Diagnostic instruments	3–5 years
Office equipment	3–6 years
Motor vehicles	5–8 years

Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate components. The estimated useful lives of the assets are regularly reviewed and, if necessary, the future depreciation charges are accelerated. Repairs and maintenance costs are expensed as incurred.

Leases

Where the Group is the lessee, leases of property, plant and equipment where the Group has substantially all of the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the start of the lease at fair value, or the present value of the minimum lease payments, if lower. The rental obligation, net of finance charges, is reported within debt. Assets acquired under finance leases are depreciated in accordance with the Group's policy on property, plant and equipment. If there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the lease term and its useful life. The interest element of the lease payment is charged against income over the lease term based on the effective interest rate method. Leases where substantially all of the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Payments made under operating leases are charged against income on a straight-line basis over the period of the lease.

Where the Group is the lessor, which primarily occurs in the Diagnostics Division, assets subject to finance leases are initially reported as receivables at an amount equal to the net investment in the lease. Assets subject to operating leases are reported within property, plant and equipment. Lease income from finance leases is subsequently recognised as earned income over the term of the lease based on the effective interest rate method. Lease income from operating leases is recognised over the lease term on a straight-line basis.

Business combinations and goodwill

Business combinations are accounted for using the acquisition method of accounting. The consideration transferred in a business combination is measured at fair value at the date of acquisition. This consideration includes the cash paid plus the fair value at the date of exchange of assets given, liabilities incurred or assumed and equity instruments issued by the Group. The fair value of the consideration transferred also includes contingent consideration arrangements at fair value. Directly attributable acquisition-related costs are expensed in the current period and reported within general and administration expenses. At the date of acquisition the Group recognises the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business. The identifiable assets acquired and the liabilities assumed are initially recognised at fair value. Where the Group does not acquire 100% ownership of the acquired business, non-controlling interests are recorded as the proportion of the fair value of the acquired net assets attributable to the non-controlling interest.

Goodwill is the excess of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquired business and the acquisition date fair value of any previous equity interest in the acquired business over the fair value of the Group's share of the identifiable net assets acquired. When the initial accounting for a business combination is incomplete at the end of a reporting period, provisional amounts are used. During the measurement period, the provisional amounts are retrospectively adjusted and additional assets and liabilities may be recognised, to reflect new information obtained about the facts and circumstances that existed at the acquisition date which would have affected the measurement of the amounts recognised at that date, had they been known. The measurement period does not exceed twelve months from the date of acquisition. Goodwill is not amortised but is tested for impairment at least annually and upon the occurrence of an indication of impairment. Goodwill may also arise upon investments in associates, being the surplus of the cost of investment over the Group's share of the fair value of the net identifiable assets. Such goodwill is recorded within investments in associates. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control.

Intangible assets

Purchased patents, licences, trademarks and other intangible assets are initially recorded at cost. Where these assets have been acquired through a business combination, this will be the fair value allocated in the acquisition accounting. Intangible assets are amortised over their useful lives on a straight-line basis beginning from the point when they are available for use. The estimated useful life is the lower of the legal duration and the economic useful life. The estimated useful lives of intangible assets are regularly reviewed.

Estimated useful lives of major classes of amortisable intangible assets are as follows:

Product intangibles in use	4–20 years
Marketing intangibles in use	2–5 years
Technology intangibles in use	7–14 years

Impairment of property, plant and equipment and intangible assets

An impairment assessment is carried out when there is evidence that an asset may be impaired. In addition intangible assets that are not yet available for use are tested for impairment annually. When the recoverable amount of an asset, being the higher of its fair value less costs to sell and its value in use, is less than its carrying value, then the carrying value is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. Value in use is calculated using estimated cash flows, generally over a five-year period, with extrapolating projections for subsequent years. These are discounted using an appropriate long-term interest rate. When an impairment loss arises, the useful life of the asset in question is reviewed and, if necessary, the future depreciation/amortisation charge is accelerated. The impairment of financial assets is discussed below in the 'Financial assets' policy.

Impairment of goodwill

Goodwill is assessed for possible impairment at each reporting date and is additionally tested annually for impairment. Goodwill is allocated to cash-generating units as described in Note 12. When the recoverable amount of the cash-generating unit, being the higher of its fair value less costs to sell or its value in use, is less than its carrying value, then the carrying value of the goodwill is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. The methodology used in the impairment testing is further described in Note 12.

Inventories

Inventories are stated at the lower of cost and net realisable value. The cost of finished goods and work in process includes raw materials, direct labour and other directly attributable costs and overheads based upon the normal capacity of production facilities. Cost is determined using the weighted average method. Net realisable value is the estimated selling price less cost to completion and selling expenses.

Accounts receivable

Accounts receivable are carried at the original invoice amount less allowances made for doubtful accounts, trade discounts, cash discounts, volume rebates and similar allowances. An allowance for doubtful accounts is recorded for the difference between the carrying value and the estimated recoverable amount where there is objective evidence that the Group will not be able to collect all amounts due. These estimates are based on specific indicators, such as the ageing of customer balances, specific credit circumstances and the Group's historical experience, taking also into account economic conditions. Expenses for doubtful trade receivables are recognised in the consolidated income statement within marketing and distribution expenses. Trade discounts, cash discounts, volume rebates and similar allowances are recorded on an accrual basis consistent with the recognition of the related sales, using estimates based on existing contractual obligations, historical trends and the Group's experience. Long-term accounts receivable are discounted to take into account the time value of money, where material.

Cash and cash equivalents

Cash and cash equivalents include cash on hand and time, call and current balances with banks and similar institutions. Such balances are only reported as cash if they are readily convertible to known amounts of cash, are subject to insignificant risk of changes in value and have a maturity of three months or less from the date of acquisition. This definition is also used for the statement of cash flows.

Provisions

Provisions are recognised where a legal or constructive obligation has been incurred which will probably lead to an outflow of resources that can be reasonably estimated. In particular, restructuring provisions are recognised when the Group has a detailed formal plan that has either commenced implementation or has been announced. Provisions are recorded for the estimated ultimate liability that is expected to arise, taking into account foreign currency effects arising from their translation from their functional currency into Swiss francs and the time value of money, where material. A contingent liability is disclosed where the existence of the obligation will only be confirmed by future events or where the amount of the obligation cannot be measured with reasonable reliability. Contingent assets are not recognised, but are disclosed where an inflow of economic benefits is probable.

Fair values

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is determined by reference to quoted market prices or by the use of established valuation techniques such as option pricing models and the discounted cash flow method if quoted prices in an active market are not available ('fair value hierarchy'). Valuation techniques will incorporate observable market data about market conditions and other factors that are likely to affect the fair value of a financial instrument. Valuation techniques are typically used for derivative financial instruments. The fair values of financial assets and liabilities at the reporting date are not materially different from their reported carrying values unless specifically mentioned in the Notes to the Annual Financial Statements. Information on fair value hierarchy is included in Note 31 on risk management.

Financial assets

Financial assets, principally investments, including marketable securities, are classified as either 'Fair-value-through-profit-or-loss', 'Available-for-sale', 'Held-to-maturity' or 'Loans and receivables'. Fair-value-through-profit-or-loss financial assets are either classified as held-for-trading or designated upon initial recognition. Held-for-trading financial assets are acquired principally to generate profit from short-term fluctuations in price. Financial assets are designated as fair-value-through-profit-or-loss if doing so results in more relevant information by eliminating a measurement or recognition inconsistency. Held-to-maturity financial assets are securities with a fixed maturity that the Group has the intent and ability to hold until maturity. Loans and receivables are financial assets created by the Group or acquired from the issuer in a primary market. They are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. All other financial assets are considered to be available-for-sale.

All financial assets are initially recorded at fair value, including transaction costs, except for assets at fair-value-through-profit-or-loss, which exclude transaction costs. All purchases and sales are recognised on the settlement date. Fair-value-through-profit-or-loss financial assets are subsequently carried at fair value, with all changes in fair value recorded as financial income in the period in which they arise. Held-to-maturity financial assets are subsequently carried at amortised cost using the effective interest rate method. Available-for-sale financial assets are subsequently carried at fair value, with all unrealised changes in fair value recorded in other comprehensive income except for interest calculated using the effective interest rate method and foreign exchange components. When the available-for-sale financial assets are sold, impaired or otherwise disposed of, the cumulative gains and losses previously recognised in other comprehensive income are included in financial income for the current period. Loans and receivables are subsequently carried at amortised cost using the effective interest rate method.

Financial assets are individually assessed for possible impairment at each reporting date. An impairment charge is recorded where there is objective evidence of impairment, such as where the issuer is in bankruptcy, default or other significant financial difficulty. In addition any available-for-sale equity securities that have a market value of more than 25% below their original cost, net of any previous impairment, will be considered as impaired. Any available-for-sale equity securities that have a market value below their original cost, net of any previous impairment, for a sustained six-month period will also be considered as impaired. Any decreases in the market price of less than 25% of original cost, net of any previous impairment, which are also for less than a sustained six-month period are not by themselves considered as objective evidence of impairment. Such movements in fair value are recorded in other comprehensive income until there is objective evidence of impairment or until the asset is sold or otherwise disposed of. For financial assets carried at amortised cost, any impairment charge is the difference between the carrying value and the recoverable amount, calculated using estimated future cash flows discounted using the original effective interest rate. For available-for-sale financial assets, any impairment charge is the amount currently carried in other comprehensive income for the difference between the original cost, net of any previous impairment, and the fair value. An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For debt securities measured at amortised cost or available-for-sale, the reversal is recognised in income. For equity securities held available-for-sale, the reversal is recognised directly in other comprehensive income.

A financial asset is derecognised when the contractual cash flows from the asset expire or when the Group transfers the rights to receive the contractual cash flows from the financial assets in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

Derivatives

Derivative financial instruments are initially recorded and subsequently carried at fair value. Apart from those derivatives designated as qualifying cash flow hedging instruments as discussed in the 'Hedge accounting' policy below, all changes in fair value are recorded as financial income in the period in which they arise. Embedded derivatives are recognised separately if not closely related to the host contract and where the host contract is carried at amortised cost.

Hedge accounting

For the purposes of hedge accounting, hedging relationships may be of three types. A 'fair value hedge' is a hedge of the exposure to changes in fair value of a recognised asset or liability, or an unrecognised firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. A 'cash flow hedge' is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction and could affect profit or loss. A 'hedge of a net investment in a foreign operation' is a hedge of the foreign currency exposure on a net investment in a foreign operation.

To qualify for hedge accounting the hedging relationship must meet several strict conditions on documentation, probability of occurrence (for cash flow hedges), hedge effectiveness and reliability of measurement. If these conditions are not met, then the relationship does not qualify for hedge accounting. In this case the hedging instrument and the hedged item are reported independently as if there were no hedging relationship. In particular any derivatives are reported at fair value, with changes in fair value included in financial income.

For qualifying fair value hedges, the hedging instrument is recorded at fair value and the hedged item is recorded at its previous carrying value, adjusted for any changes in fair value that are attributable to the hedged risk. Any changes in the fair values are reported in financial income.

For qualifying cash flow hedges, the hedging instrument is recorded at fair value. The portion of any change in fair value that is an effective hedge is included in other comprehensive income, and any remaining ineffective portion is reported in financial income. If the hedging relationship is the hedge of the foreign currency risk of a firm commitment or highly probable forecasted transaction that results in the recognition of a non-financial asset or liability, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in the initial carrying value of the asset or liability at the date of recognition. For all other qualifying cash flow hedges, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in financial income when the forecasted transaction affects net income.

For qualifying hedges of net investment in a foreign entity, the hedging instrument is recorded at fair value. The portion of any change in fair value that is an effective hedge is included in other comprehensive income. Any remaining ineffective portion is recorded in financial income where the hedging instrument is a derivative and in other comprehensive income in other cases. If the entity is disposed of, then the cumulative changes of fair value of the hedging instrument that have been recorded in other comprehensive income are reclassified to income.

Debt

Debt instruments are initially recorded at cost, which is the proceeds received, net of transaction costs. Subsequently they are reported at amortised cost. Any discount between the net proceeds received and the principal value due on redemption is amortised over the duration of the debt instrument and is recognised as part of financing costs using the effective interest rate method. The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expired.

Taxation

Income taxes include all taxes based upon the taxable profits of the Group, including withholding taxes payable on the distribution of retained earnings within the Group. Other taxes not based on income, such as property and capital taxes, are included within general and administration expenses.

Liabilities for income taxes, mainly withholding taxes, which could arise on the remittance of retained earnings, principally relating to subsidiaries, are only recognised where it is probable that such earnings will be remitted in the foreseeable future.

Deferred income tax assets and liabilities are recognised on temporary differences between the tax bases of assets and liabilities and their carrying values in the financial statements. Deferred income tax assets relating to the carry-forward of unused tax losses are recognised to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilised.

Current and deferred income tax assets and liabilities are offset when the income taxes are levied by the same taxation authority and when there is a legally enforceable right to offset them. Deferred income taxes are determined based on the currently enacted tax rates applicable in each tax jurisdiction where the Group operates.

Own equity instruments

The Group's holdings in its own equity instruments are recorded as a deduction from equity. The original purchase cost, consideration received for subsequent resale of these equity instruments and other movements are reported as changes in equity. These instruments have been acquired primarily to meet the potential obligations to employees that may arise in respect of certain of the Group's equity compensation plans.

Management judgements made in applying accounting policies

The application of the Group's accounting policies may require management to make judgements, apart from those involving estimates, that can have a significant effect on the amounts recognised in the Annual Financial Statements. Management judgement is particularly required when assessing the substance of transactions that have a complicated structure or legal form. These include, but are not limited to, the following areas:

Revenue recognition. The nature of the Group's business is such that many sales transactions do not have a simple structure. Sales agreements may consist of multiple components occurring at different times. The Group is also party to various out-licensing agreements, which can involve upfront and milestone payments that may occur over several years. These agreements may also involve certain future obligations. Revenue is only recognised when, in management's judgement, the significant risks and rewards of ownership have been transferred and when the Group does not retain continuing managerial involvement or effective control over the goods sold or when the obligation has been fulfilled. For some transactions this can result in cash receipts being initially recognised as deferred income and then released to income over subsequent periods on the basis of the performance of the conditions specified in the agreement.

Consolidation of subsidiaries and associates. The Group periodically undertakes transactions that may involve obtaining the right to control or significantly influence the operations of other companies. These transactions include the acquisition of all or part of the equity of other companies, the purchase of certain assets and assumption of certain liabilities and contingent liabilities of other companies, and entering into alliance agreements with other companies. Also included are transactions involving Special Purpose Entities and similar vehicles. In all such cases management makes an assessment as to whether the Group has the right to control or significantly influence the other company's operations, and based on this assessment the other company is consolidated as a subsidiary or associated company. In making this assessment management considers the underlying economic substance of the transaction and not only the contractual terms.

Business combinations. Where the Group acquires control of another business, the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business shall be recognised, separately from goodwill. This process involves management making an assessment of the fair value of these items. Management judgement is particularly involved in the recognition and measurement of the following items:

- Intellectual property. This may include patents, licences, trademarks and similar rights for currently marketed products, and also the rights and scientific knowledge associated with projects that are currently in research or development phases.
- Contingencies such as legal and environmental matters.
- Contingent consideration arrangements.
- The recoverability of any accumulated tax losses previously incurred by the acquired company.

In all cases management makes an assessment based on the underlying economic substance of the items concerned, and not only on the contractual terms, in order to fairly present these items.

Leases. The Group is party to leasing arrangements, both as a lessee and as a lessor. The treatment of leasing transactions in the financial statements is mainly determined by whether the lease is considered to be an operating lease or a finance lease. In making this assessment, management looks at the substance of the lease, as well as the legal form, and makes a judgement about whether substantially all of the risks and rewards of ownership are transferred. Arrangements which do not take the legal form of a lease but that nevertheless convey the right to use an asset are also covered by such assessments.

Key assumptions and sources of estimation uncertainty

The preparation of the Annual Financial Statements in conformity with IFRS requires management to make estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income, expenses and related disclosures. The estimates and underlying assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Changes in accounting estimates may be necessary if there are changes in the circumstances on which the estimate was based, or as a result of new information or more experience. Such changes are recognised in the period in which the estimate is revised.

The key assumptions about the future and key sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying value of assets and liabilities within the next twelve months are described below.

Revenue recognition. There may be circumstances such that the level of sales returns, and hence revenues, cannot be reliably measured. In such cases sales are only recognised when the right of return expires, which is generally upon prescription of the products to patients. In order to estimate this, management uses publicly available information about prescriptions as well as information provided by wholesalers and other intermediaries.

Sales allowances. The Group has provisions and accruals for expected sales returns, charge-backs and other rebates, including Medicaid in the United States and similar rebates in other countries, which at 31 December 2012 total 1,856 million Swiss francs. Such estimates are based on analyses of existing contractual or legislatively-mandated obligations, historical trends and the Group's experience. Management believes that the total provisions and accruals for these items are adequate, based upon currently available information. As these deductions are based on management estimates, they may be subject to change as better information becomes available. Such changes that arise could impact the provisions and accruals recognised in the balance sheet in future periods and consequently the level of sales recognised in the income statement in future periods.

Allowances for doubtful accounts receivable. The Group has provisions for doubtful receivables, which at 31 December 2012 total 474 million Swiss francs (see Note 17). Such estimates are based on analyses of ageing of customer balances, specific credit circumstances, historical trends and the Group's experience, taking also into account economic conditions. Management believes that the total provisions and accruals for these items are adequate, based upon currently available information. As these provisions are based on management estimates, they may be subject to change as better information becomes available. Such changes that arise could impact the provisions recognised in the balance sheet in future periods and consequently the marketing and distribution expenses recognised in the income statement in future periods.

Property, plant and equipment and intangible assets, including goodwill. The Group has property, plant and equipment with a carrying value of 15,402 million Swiss francs as disclosed in Note 11. Goodwill has a carrying value of 7,480 million Swiss francs (see Note 12) and intangible assets have a carrying value of 4,214 million Swiss francs (see Note 13). All of these assets are reviewed annually for impairment as described above. To assess whether any impairment exists, estimates are made of the future cash flows expected to result from the use of the asset and its eventual disposal. Actual outcomes could vary significantly from such estimates of discounted future cash flows. Factors such as changes in the planned use of buildings, machinery or equipment, or closure of facilities, the presence or absence of competition, technical obsolescence or lower than anticipated sales of products with capitalised rights could result in shortened useful lives or impairment. Changes in the discount rates used could also lead to impairments.

Pensions and other post-employment benefits. Many of the Group's employees participate in post-employment defined benefit plans. The calculations of the recognised assets and liabilities from such plans are based upon statistical and actuarial calculations. In particular the present value of the defined benefit obligation is impacted by assumptions on discount rates used to arrive at the present value of future pension liabilities, and assumptions on future increases in salaries and benefits. Furthermore, the Group's independent actuaries use statistically based assumptions covering areas such as future withdrawals of participants from the plan and estimates of life expectancy. At 31 December 2012 the present value of the Group's defined benefit obligation is 13,824 million Swiss francs for funded plans and 4,090 million Swiss francs for unfunded plans (see Note 9). The actuarial assumptions used may differ materially from actual results due to changes in market and economic conditions, higher or lower withdrawal rates, longer or shorter life spans of participants, and other changes in the factors being assessed. These differences could impact the assets or liabilities recognised in the balance sheet in future periods.

Legal provisions. Group companies are party to various legal matters, including claims arising from trade, and the most significant matters are described in Note 24. Legal provisions at 31 December 2012 total 728 million Swiss francs. Management believes that the total provisions for legal matters are adequate based upon currently available information. Most of the legal matters involve highly complex issues which are subject to substantial uncertainties and therefore the probability of a loss, if any, being sustained and an estimate of the amount of any loss is difficult to ascertain. Given the inherent difficulties in estimating liabilities in this area, it cannot be guaranteed that additional costs will not be incurred beyond the amounts accrued. Additional claims could be made which might not be covered by existing provisions or by insurance. There can be no assurance that there will not be an increase in the scope of these matters or that any future lawsuits, claims, proceedings or investigations will not be material. Such changes that arise could impact the provisions recognised in the balance sheet in future periods. For a number of the legal matters, it is not possible to make a reasonable estimate of the expected financial effect, if any, that will result from the ultimate resolution of these matters. In these cases, Roche discloses information with respect to the nature and facts of the legal matters. Disclosure of which legal matters have been provided for and which have been disclosed as contingent liabilities has not been made as this would seriously prejudice our position in these matters.

Environmental provisions. The Group has provisions for environmental remediation costs, which at 31 December 2012 total 566 million Swiss francs, as disclosed in Note 24. The material components of the environmental provisions consist of costs to fully clean and refurbish contaminated sites, including landfills, and to treat and contain contamination at certain other sites. Future remediation expenses are affected by a number of uncertainties that include, but are not limited to, the detection of previously unknown contaminated sites, the method and extent of remediation, the percentage of the problematic materials attributable to the Group at the remediation sites relative to that attributable to other parties, and the financial capabilities of the other potentially responsible parties. Management believes that the total provisions for environmental matters are adequate based upon currently available information. However, given the inherent difficulties in estimating liabilities in this area, it cannot be guaranteed that additional costs will not be incurred beyond the amounts accrued. The effect of the resolution of environmental matters on the results of operations cannot be predicted due to uncertainty concerning both the amount and the timing of future expenditures. Such changes that arise could impact the provisions recognised in the balance sheet in future periods.

Income taxes. At 31 December 2012 the net liability for current income taxes is 1,871 million Swiss francs and the net asset for deferred income taxes is 3,462 million Swiss francs, as disclosed in Note 5. Significant estimates are required to determine the current and deferred assets and liabilities for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations. Management believes that the estimates are reasonable and that the recognised liabilities for income tax-related uncertainties are adequate. Various internal and external factors may have favourable or unfavourable effects on the income tax assets and liabilities. These factors include, but are not limited to, changes in tax laws, regulations and/or rates, changing interpretations of existing tax laws or regulations, future levels of research and development spending and changes in overall levels of pre-tax earnings. Such changes that arise could impact the assets and liabilities recognised in the balance sheet in future periods.

Changes in accounting policies

Changes in accounting policies that arise from the application of new or revised standards and interpretations are applied retrospectively, unless the transitional requirements of the particular standard or interpretation specify that the changes are to be applied prospectively. Retrospective application requires that the results of the comparative period and the opening balances of that period are restated as if the new accounting policy had always been applied. Prospective application requires that the new accounting policy only be applied to the results of the current period and the comparative period is not restated. Comparatives are reclassified or extended from the previously reported results to take into account any presentational changes that are required on the application of new or revised standards and interpretations.

Changes in IFRS implemented in 2012. The Group has implemented various minor amendments to existing standards and interpretations, which have no material impact on the Group's overall results and financial position.

New and revised standards. The following new standards have been issued by the International Accounting Standards Board (IASB) and will be implemented on 1 January 2013:

- IFRS 10 'Consolidated Financial Statements'.
- IFRS 11 'Joint Arrangements'.
- IFRS 12 'Disclosure of Interests in Other Entities'.
- IFRS 13 'Fair Value Measurement'.
- IAS 19 (revised) 'Employee Benefits'.

The Group does not expect that the adoption of the standards listed above will have a material impact on the Group's overall results and financial position, except for IAS 19 (revised) 'Employee Benefits'.

The revised version of IAS 19 will be adopted on 1 January 2013 and will be applied retrospectively. Amongst other matters the revised version of IAS 19 'Employee Benefits' includes the following changes to the existing standard:

- Eliminating the option to defer the recognition of actuarial gains and losses from defined benefit post-employment plans, known as the 'corridor method'. The Group does not currently apply this option, but rather uses the option to recognise such gains and losses directly in other comprehensive income. The option currently applied by the Group will henceforth be a requirement under the revised standard and therefore this change will have no impact on the Group's financial statements.
- The current method of including the expected income from plan assets at an estimated asset return would be replaced by using the discount rate that is used to discount the defined benefit obligation. The Group estimates that, had this method been applied to the 2012 Annual Financial Statements, net financial income would have been approximately 161 million Swiss francs lower than that published. Operating profit would not have been materially affected.

2. Operating segment information

Divisional information in millions of CHF

	Pharmaceuticals		Diagnostics		Corporate		Group	
	2012	2011	2012	2011	2012	2011	2012	2011
Revenues from external customers								
Sales	35,232	32,794	10,267	9,737	–	–	45,499	42,531
Royalties and other operating income	1,794	1,453	151	129	–	–	1,945	1,582
Total	**37,026**	**34,247**	**10,418**	**9,866**	**–**	**–**	**47,444**	**44,113**
Revenues from other operating segments								
Sales	–	–	13	11	–	–	13	11
Royalties and other operating income	–	–	–	–	–	–	–	–
Elimination of inter-divisional revenue							(13)	(11)
Total	**–**	**–**	**13**	**11**	**–**	**–**	**–**	**–**
Segment results								
Operating profit	13,677	12,251	1,284	1,656	(836)	(453)	14,125	13,454
Capital expenditure								
Business combinations	–	246	17	356	–	–	17	602
Additions to property, plant and equipment	1,049	1,049	1,079	956	2	1	2,130	2,006
Additions to intangible assets	209	236	25	10	–	–	234	246
Total capital expenditure	**1,258**	**1,531**	**1,121**	**1,322**	**2**	**1**	**2,381**	**2,854**
Research and development								
Research and development costs	8,529	7,397	1,023	929	–	–	9,552	8,326
Other segment information								
Depreciation of property, plant and equipment	1,057	1,079	828	763	6	6	1,891	1,848
Amortisation of intangible assets	181	152	349	368	–	–	530	520
Impairment of property, plant and equipment	444	93	18	3	–	–	462	96
Impairment of goodwill	–	–	187	–	–	–	187	–
Impairment of intangible assets	489	79	36	59	–	–	525	138
Impairment of net assets-held-for-sale	–	117	–	–	–	–	–	117
Equity compensation plan expenses	307	317	35	36	21	18	363	371

Pharmaceuticals sub-divisional information in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
	2012	2011	2012	2011	2012	2011
Revenues from external customers						
Sales	31,124	28,977	4,108	3,817	35,232	32,794
Royalties and other operating income	1,731	1,407	63	46	1,794	1,453
Total	**32,855**	**30,384**	**4,171**	**3,863**	**37,026**	**34,247**
Revenues from other operating segments						
Sales	1,065	825	300	228	1,365	1,053
Royalties and other operating income	25	22	70	50	95	72
Elimination of income within division					(1,460)	(1,125)
Total	**1,090**	**847**	**370**	**278**	**–**	**–**
Segment results						
Sub-divisional profit	12,910	11,743	805	593	13,715	12,336
Elimination of profit within division					(38)	(85)
Operating profit	**12,910**	**11,743**	**805**	**593**	**13,677**	**12,251**
Capital expenditure						
Business combinations	–	246	–	–	–	246
Additions to property, plant and equipment	882	872	167	177	1,049	1,049
Additions to intangible assets	206	229	3	7	209	236
Total capital expenditure	**1,088**	**1,347**	**170**	**184**	**1,258**	**1,531**
Research and development						
Research and development costs	7,751	6,622	800	795	8,551	7,417
Elimination of costs within division					(22)	(20)
Total	**7,751**	**6,622**	**800**	**795**	**8,529**	**7,397**
Other segment information						
Depreciation of property, plant and equipment	903	938	154	141	1,057	1,079
Amortisation of intangible assets	112	83	69	69	181	152
Impairment of property, plant and equipment	441	77	3	16	444	93
Impairment of goodwill	–	–	–	–	–	–
Impairment of intangible assets	489	79	–	–	489	79
Impairment of net assets-held-for-sale	–	117	–	–	–	117
Equity compensation plan expenses	304	314	3	3	307	317

Net operating assets in millions of CHF

	Assets			Liabilities			Net assets		
	2012	2011	2010	2012	2011	2010	2012	2011	2010
Pharmaceuticals	26,785	27,877	28,546	(8,282)	(7,869)	(8,185)	18,503	20,008	20,361
Diagnostics	17,261	18,136	17,454	(2,532)	(2,613)	(2,404)	14,729	15,523	15,050
Corporate	156	162	172	(536)	(202)	(214)	(380)	(40)	(42)
Total operating	**44,202**	**46,175**	**46,172**	**(11,350)**	**(10,684)**	**(10,803)**	**32,852**	**35,491**	**35,369**
Non-operating	20,603	15,401	14,848	(36,727)	(36,410)	(38,555)	(16,124)	(21,009)	(23,707)
Group	**64,805**	**61,576**	**61,020**	**(48,077)**	**(47,094)**	**(49,358)**	**16,728**	**14,482**	**11,662**

Non-operating assets and liabilities consist primarily of balances related to treasury, pensions and taxation matters.

Net operating assets – Pharmaceuticals sub-divisional information in millions of CHF

	Assets			Liabilities			Net assets		
	2012	2011	2010	2012	2011	2010	2012	2011	2010
Roche Pharmaceuticals	22,962	23,542	24,223	(7,323)	(7,119)	(7,517)	15,639	16,423	16,706
Chugai	4,532	5,088	4,955	(959)	(750)	(668)	3,573	4,338	4,287
Elimination within division	(709)	(753)	(632)	–	–	–	(709)	(753)	(632)
Pharmaceuticals Division	**26,785**	**27,877**	**28,546**	**(8,282)**	**(7,869)**	**(8,185)**	**18,503**	**20,008**	**20,361**

Information by geographical area in millions of CHF

	Revenues from external customers		Non-current assets	
	Sales	Royalties and other operating income	Property, plant and equipment	Goodwill and intangible assets
2012				
Switzerland	505	257	3,599	1,867
European Union	12,214	51	4,001	1,787
– *of which Germany*	*2,534*	*48*	*2,938*	*1,746*
Rest of Europe	1,628	–	62	1
Europe	**14,347**	**308**	**7,662**	**3,655**
United States	15,932	1,567	4,422	7,483
Rest of North America	1,035	2	97	87
North America	**16,967**	**1,569**	**4,519**	**7,570**
Latin America	3,410	–	408	14
Japan	4,735	63	1,638	334
Rest of Asia	4,368	4	1,081	119
Asia	**9,103**	**67**	**2,719**	**453**
Africa, Australia and Oceania	1,672	1	94	2
Total	**45,499**	**1,945**	**15,402**	**11,694**
2011				
Switzerland	507	190	3,482	1,912
European Union	12,815	54	4,064	1,913
– *of which Germany*	*2,595*	*47*	*3,000*	*1,871*
Rest of Europe	1,486	2	43	1
Europe	**14,808**	**246**	**7,589**	**3,826**
United States	14,133	1,283	5,134	8,465
Rest of North America	1,047	2	109	86
North America	**15,180**	**1,285**	**5,243**	**8,551**
Latin America	3,115	1	406	15
Japan	4,314	46	1,864	383
Rest of Asia	3,616	4	1,007	191
Asia	**7,930**	**50**	**2,871**	**574**
Africa, Australia and Oceania	1,498	–	92	3
Total	**42,531**	**1,582**	**16,201**	**12,969**

Supplementary unaudited information on sales by therapeutic areas in the Pharmaceuticals Division and by business areas in the Diagnostics Division are given in the Financial Review. Sales are allocated to geographical areas by destination according to the location of the customer. Royalties and other operating income are allocated according to the location of the Group company that receives the revenue. European Union information is based on members of the EU as at 31 December 2012.

Major customers

The US national wholesale distributors, AmerisourceBergen Corp. and McKesson Corp., each represented approximately 5 billion Swiss francs of the Group's revenues (2011: AmerisourceBergen Corp. 5 billion Swiss francs and McKesson Corp. 4 billion Swiss francs). Approximately 96% of these revenues were in the Pharmaceuticals operating segment, with the residual in the Diagnostics segment. The Group also reported substantial revenues from the US national wholesale distributor, Cardinal Health, Inc., and in total these three customers represented approximately a quarter of the Group's revenues.

3. Chugai

Effective 1 October 2002 the Roche Group and Chugai completed an alliance to create a leading research-driven Japanese pharmaceutical company, which was formed by the merger of Chugai and Roche's Japanese pharmaceuticals subsidiary, Nippon Roche. The merged company, known as Chugai, is a fully consolidated subsidiary of the Group. At 31 December 2012 the Group's interest in Chugai was 61.6% (2011: 61.6%).

The common stock of Chugai is publicly traded and is listed on the Tokyo Stock Exchange under the stock code 'TSE:4519'. Chugai prepares financial statements in conformity with accounting principles generally accepted in Japan (JGAAP). These are filed on a quarterly basis with the Tokyo Stock Exchange. Due to certain consolidation entries and differences in the requirements of International Financial Reporting Standards (IFRS) and JGAAP, there are differences between Chugai's stand-alone results on a JGAAP basis and the results of Chugai as consolidated by the Roche Group in accordance with IFRS.

Roche's relationship with Chugai

Chugai has entered into certain agreements with Roche, which are discussed below:

Basic Alliance Agreement. As part of the Basic Alliance Agreement signed in December 2001, Roche and Chugai entered into certain arrangements covering the future operation and governance of Chugai. Amongst other matters these cover the following areas:

- The structuring of the alliance.
- Roche's rights as a shareholder.
- Roche's rights to nominate members of Chugai's Board of Directors.
- Certain limitations to Roche's ability to buy or sell Chugai's common stock.

Chugai issues additional shares of common stock in connection with its convertible debt and equity compensation plans, and may issue additional shares for other purposes, which affects Roche's percentage ownership interest. The Basic Alliance Agreement provides, amongst other matters, that Chugai will guarantee Roche's right to maintain its shareholding percentage in Chugai at not less than 50.1%.

Licensing Agreements. Under the Japan Umbrella Rights Agreement signed in December 2001, Chugai has exclusive rights to market Roche's pharmaceutical products in Japan. Chugai also has right of first refusal on the development and marketing in Japan of all development compounds advanced by Roche.

Under the Rest of the World Umbrella Rights Agreement signed in May 2002, Roche has the right of first refusal on the development and marketing of Chugai's development compounds in markets outside Japan, excluding South Korea, if Chugai decides that it requires a partner for such activities.

Further to these agreements, Roche and Chugai have signed a series of separate agreements for certain specific products. Depending on the specific circumstances and the terms of the agreement, this may result in payments on an arm's length basis between Roche and Chugai, for any or all of the following matters:

- Upfront payments, if a right of first refusal to license a product is exercised.
- Milestone payments, dependent upon the achievement of agreed performance targets.
- Royalties on future product sales.

These specific product agreements may also cover the manufacture and supply of the respective products to meet the other party's clinical and/or commercial requirements on an arm's length basis.

Research Collaboration Agreements. Roche and Chugai have entered into research collaboration agreements in the areas of small-molecule synthetic drug research and biotechnology-based drug discovery.

Dividends

The dividends distributed to third parties holding Chugai shares during 2012 totalled 98 million Swiss francs (2011: 100 million Swiss francs) and have been recorded against non-controlling interests (see Note 29). Dividends paid by Chugai to Roche are eliminated on consolidation as inter-company items.

East Japan Earthquake

On 11 March 2011 a severe earthquake and tsunami struck the Pacific coast of Tohoku, Japan. The consequences on Chugai's operations in Japan were limited. The impacts of this disaster have been carefully reviewed regarding operations, manufacturing processes and supply chain. Damage at Chugai's Utsunomiya manufacturing plant resulted in operations there being temporarily halted and production of all products at this plant was fully resumed by the end of August 2011. The costs recorded in 2011 for the damage caused by the earthquake mainly relate to the Utsunomiya plant. These consisted of impairments and restoration costs for buildings and partially damaged facilities, write-offs of some intermediates and finished products and other costs during shutdown, net of amounts received from insurance. These costs were recorded as shown below. Some of Chugai's contract manufacturers were also affected by the earthquake and, as a result, product shipment control lasted until the end of October 2011. Chugai's promotional activities in Japan were affected, with events cancelled and employee resources diverted to ensure continued product supply and information flow for customers. These factors had a certain negative impact on Chugai's sales in the second half of 2011.

Global issues: East Japan Earthquake costs in millions of CHF

	2012	2011
Cost of sales	–	(47)
Marketing and distribution	–	(7)
General and administration	–	(3)
Total	**–**	**(57)**

Other matters

Details of Chugai's equity compensation plans are given in Note 10.

4. Financial income and financing costs

Financial income in millions of CHF

	Year ended 31 December 2012	2011
Gains on sale of equity securities	65	106
(Losses) on sale of equity securities	(5)	(6)
Dividend income	2	1
Gains (losses) on equity security derivatives, net	1	1
Write-downs and impairments of equity securities	(25)	(38)
Net income from equity securities	**38**	**64**
Interest income	32	73
Gains on sale of debt securities	1	31
(Losses) on sale of debt securities	(1)	(17)
Gains (losses) on debt security derivatives, net	–	–
Write-downs and impairments of long-term loans	–	(16)
Net interest income and income from debt securities	**32**	**71**
Expected return on plan assets of defined benefit plans [9]	514	500
Foreign exchange gains (losses), net	(120)	(103)
Gains (losses) on foreign currency derivatives, net	31	123
Net foreign exchange gains (losses)	**(89)**	**20**
Net other financial income (expense)	(24)	(8)
Total financial income	**471**	**647**

Financing costs in millions of CHF

	Year ended 31 December 2012	2011
Interest expense	(1,396)	(1,441)
Amortisation of debt discount [26]	(30)	(35)
Gains (losses) on debt derivatives, net	–	–
Gains (losses) on redemption and repurchase of bonds and notes, net [26]	(259)	(172)
Time cost of provisions [24]	(12)	(15)
Interest cost of defined benefit plans [9]	(576)	(565)
Total financing costs	**(2,273)**	**(2,228)**

Net financial income in millions of CHF

	Year ended 31 December 2012	2011
Financial income	471	647
Financing costs	(2,273)	(2,228)
Net financial income	**(1,802)**	**(1,581)**
Financial result from Treasury management	(1,740)	(1,516)
Financial result from Pension management	(62)	(65)
Net financial income	**(1,802)**	**(1,581)**

5. Income taxes

Income tax expenses in millions of CHF

	2012	2011
Current income taxes	(3,402)	(2,693)
Adjustments recognised for current tax of prior periods	70	(5)
Deferred income taxes	782	357
Total income (expense)	**(2,550)**	**(2,341)**

Since the Group operates internationally, it is subject to income taxes in many different tax jurisdictions. The Group calculates its average expected tax rate as a weighted average of the tax rates in the tax jurisdictions in which the Group operates. This rate changes from year to year due to changes in the mix of the Group's taxable income and changes in local tax rates.

The Group's average expected tax rate increased by 0.7 percentage points to 20.3% in 2012 (2011: 19.6%). The main driver of the increase was due to the growth in the proportion of the Group's profits generated in the US and Japan, both of which have a relatively higher local tax rate than the average Group rate. There were no significant local tax rate changes in the main operating areas of the Group compared to 2011.

The Group's effective tax rate increased by 1.0 percentage point to 20.7% in 2012 (2011: 19.7%). Other than the 0.7 percentage points increase in the average expected tax rate, the other main driver for the increase was the non-deductible goodwill impairment.

The Group's effective tax rate can be reconciled to the Group's average expected tax rate as follows:

Reconciliation of the Group's effective tax rate

	2012	2011
Average expected tax rate	20.3%	19.6%
Tax effect of		
– Non-taxable income/non-deductible expenses	+1.8%	+1.1%
– Equity compensation plans	–0.3%	–0.1%
– Research, development and other manufacturing tax credits	–2.1%	–2.1%
– US state tax impacts	+0.8%	+0.9%
– Other differences	+0.2%	+0.3%
Group's effective tax rate	**20.7%**	**19.7%**

The income tax benefits recorded in respect of equity compensation plans, which varies according to the price of the underlying equity, was 133 million Swiss francs (2011: 120 million Swiss francs). Had the income tax benefits been recorded solely on the basis of the IFRS 2 expense multiplied by the applicable tax rate, then benefits of approximately 107 million Swiss francs (2011: 112 million Swiss francs) would have been recorded.

Tax effects of other comprehensive income in millions of CHF

	Pre-tax amount	Tax benefit	2012 After-tax amount	Pre-tax amount	Tax benefit	2011 After-tax amount
Available-for-sale investments	(2)	–	(2)	(79)	27	(52)
Cash flow hedges	98	(37)	61	112	(40)	72
Currency translation of foreign operations	(693)	–	(693)	7	–	7
Defined benefit post-employment plans	(1,805)	491	(1,314)	(1,190)	350	(840)
Other comprehensive income	**(2,402)**	**454**	**(1,948)**	**(1,150)**	**337**	**(813)**

Income tax assets (liabilities) in millions of CHF

	2012	2011	2010
Current income taxes			
– Assets	339	222	168
– Liabilities	(2,210)	(2,206)	(2,037)
Net current income tax assets (liabilities)	**(1,871)**	**(1,984)**	**(1,869)**
Deferred income taxes			
– Assets	4,856	2,762	2,368
– Liabilities	(1,394)	(604)	(885)
Net deferred income tax assets (liabilities)	**3,462**	**2,158**	**1,483**

Movements in amounts recorded on the balance sheet for current income taxes are shown in the table below:

Current income taxes: movements in recognised net assets (liabilities) in millions of CHF

	2012	2011
Net current income tax asset (liability) at 1 January	(1,984)	(1,869)
Income taxes paid	3,329	2,594
(Charged) credited to the income statement		
– Current income taxes	(3,402)	(2,693)
– Adjustments recognised for current tax of prior periods	70	(5)
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	54	2
Currency translation effects and other	62	(13)
Net current income tax asset (liability) at 31 December	**(1,871)**	**(1,984)**

Deferred income tax assets are recognised for tax losses carried forward only to the extent that realisation of the related tax benefit is probable. The Group has unrecognised tax losses, including valuation allowances, as follows:

Unrecognised tax losses: expiry

	Amount (mCHF)	2012 Applicable tax rate	Amount (mCHF)	2011 Applicable tax rate
Within one year	35	21%	–	–
Between one and five years	590	16%	193	17%
More than five years	2,821	5%	2,210	6%
Total unrecognised tax losses	**3,446**	**7%**	**2,403**	**7%**

The 'More than five years' category includes losses that cannot be used for US state income tax purposes in those states which only permit tax reporting on a separate entity basis.

Deferred income tax liabilities have not been established for the withholding tax and other taxes that would be payable on the unremitted earnings of foreign subsidiaries, as such amounts are currently regarded as permanently reinvested. The total foreign unremitted earnings of the Group were 30.9 billion Swiss francs at 31 December 2012 (2011: 24.8 billion Swiss francs).

Movements in amounts recorded on the balance sheet for deferred income taxes are shown in the table below:

Deferred income taxes: movements in recognised net assets (liabilities) in millions of CHF

	Property, plant and equipment	Intangible assets	Post-employment benefits	Other temporary differences	Total
Year ended 31 December 2011					
At 1 January 2011	(1,039)	(1,400)	759	3,163	1,483
Business combinations[6]	–	(121)	–	29	(92)
(Charged) credited to the income statement	30	167	(48)	208	357
(Charged) credited to other comprehensive income[27]	–	–	350	(13)	337
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	–	–	–	43	43
Currency translation effects and other	(8)	5	9	24	30
At 31 December 2011	**(1,017)**	**(1,349)**	**1,070**	**3,454**	**2,158**
Year ended 31 December 2012					
At 1 January 2012	(1,017)	(1,349)	1,070	3,454	2,158
Business combinations[6]	–	(4)	–	–	(4)
(Charged) credited to the income statement	162	245	(61)	436	782
(Charged) credited to other comprehensive income[27]	–	–	491	(37)	454
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	–	–	–	192	192
Currency translation effects and other	43	29	(27)	(165)	(120)
At 31 December 2012	**(812)**	**(1,079)**	**1,473**	**3,880**	**3,462**

The deferred income tax assets for other temporary differences mainly relates to accrued and other liabilities, provisions and unrealised profit in inventory.

6. Business combinations

Acquisitions – 2012

Verum. Effective 3 January 2012 the Group acquired a 100% controlling interest in the privately owned company Verum Diagnostica GmbH, ('Verum'), based in Munich, Germany. Verum is specialised in coagulation diagnostics with a focus on platelet function testing, the most rapidly growing field in the coagulation market. Verum is reported as part of the Diagnostics operating segment. The acquisition of Verum will allow the Group to gain further market share in the coagulation segment and thus further strengthen its leading position in the clinical diagnostic market. The purchase consideration was 11 million euros of which 10 million euros were paid in cash and 1 million euros arose from a contingent consideration arrangement. The contingent payment from this arrangement is based on the achievement of performance-related milestones and the range of outcomes, undiscounted, is between zero and 2 million euros. A liability of 1 million Swiss francs was recognised at the acquisition date and at 31 December 2012, based on management's best estimate of the probability-adjusted expected cash outflow from the arrangement. The purchase consideration of 13 million Swiss francs has been allocated as shown in the table below.

Acquisitions – 2012: net assets acquired in millions of CHF

	Carrying value prior to acquisition	Fair value adjustments	Carrying value upon acquisition
Intangible assets – Product intangibles: in use	–	17	17
Inventories	1	–	1
Deferred income taxes	–	(4)	(4)
Other net assets (liabilities)	(1)	–	(1)
Net identifiable assets (liabilities)	**–**	**13**	**13**
Goodwill			–
Purchase consideration			**13**

The impact of the Verum acquisition on the Diagnostics Division and Group reported results was not material.

Acquisitions – 2012: net cash outflow in millions of CHF

	Cash consideration paid	Cash in acquired company	Net cash outflow
Acquisitions – 2012	(12)	–	(12)
Contingent consideration paid on prior year acquisitions	(24)	–	(24)
Total	**(36)**	**–**	**(36)**

Acquisitions – 2011

PVT. Effective 29 April 2011 the Group acquired a 100% controlling interest in the privately owned companies PVT Probenverteiltechnik GmbH, based in Waiblingen, Germany, and PVT Lab Systems, LLC, based in Atlanta, Georgia, in the United States (jointly 'PVT'). PVT is a global market leader in providing customised automation and workflow solutions for *in vitro* diagnostic testing in large commercial and hospital laboratories. PVT is reported as part of the Diagnostics operating segment. The acquisition complements and strengthens the Group's portfolio in the clinical diagnostics market. The purchase consideration for PVT Probenverteiltechnik GmbH was 87 million euros of which 62 million euros were paid in cash and 25 million euros arose from a contingent consideration arrangement. The purchase consideration for PVT Lab Systems, LLC was 5 million US dollars paid in cash. The contingent payment from this arrangement is based on the achievement of performance-related milestones that may arise until the end of 2013 and the range of outcomes, undiscounted, is between 5 and 27 million euros. A liability of 32 million Swiss francs was recognised at the acquisition date, based on management's best estimate of the probability-adjusted expected cash outflow from the arrangement. As at 31 December 2012 the amount recognised for this arrangement was 28 million Swiss francs based on the most recent management estimates and reflecting closing balance sheet foreign exchange rates.

mtm laboratories. Effective 31 August 2011 the Group acquired a 100% controlling interest in the privately owned mtm laboratories AG ('mtm laboratories'). Based in Heidelberg, Germany, mtm laboratories develops *in vitro* diagnostics for the detection and diagnosis of cancer with a focus on cervical cancer early detection. mtm laboratories is reported as part of the Diagnostics operating segment. The acquisition complements the Group's portfolio offering for cervical cancer testing in the Roche Tissue Diagnostics business. The total purchase consideration was 173 million euros, of which 131 million euros were paid in cash and 42 million euros arose from a contingent consideration arrangement. The contingent payment from this arrangement is based on the achievement of one milestone that may arise between 2014 and 2019 and the range of outcomes, undiscounted, is between zero and 60 million euros. A liability of 49 million Swiss francs was recognised at the acquisition date, based on management's best estimate of the probability-adjusted expected cash outflow from the arrangement. As at 31 December 2012 the amount recognised for this arrangement was 50 million Swiss francs based on the most recent management estimates and reflecting closing balance sheet foreign exchange rates.

Anadys Pharmaceuticals. Effective 23 November 2011 the Group acquired a 100% controlling interest in Anadys Pharmaceuticals, Inc. ('Anadys'), a publicly owned US company based in San Diego, California. Prior to the acquisition, Anadys was listed on the NASDAQ under the symbol 'ANDS'. Anadys develops oral, small molecule therapeutics for the potential treatment of hepatitis C virus (HCV) infection and is reported as part of the Roche Pharmaceuticals operating segment. The acquisition will further augment the Group's HCV portfolio. The total purchase consideration was 230 million US dollars paid in cash.

The combined purchase consideration of 531 million Swiss francs, consisting of 450 million Swiss francs in cash and 81 million Swiss francs from contingent consideration arrangements, has been allocated as shown in the table below.

Acquisitions – 2011: net assets acquired in millions of CHF

	Carrying value prior to acquisition	Fair value adjustments	Carrying value upon acquisition
Property, plant and equipment	3	–	3
Intangible assets			
– Product intangibles: in use	–	243	243
– Product intangibles: not available for use	–	158	158
– Marketing intangibles	–	4	4
Inventories	12	–	12
Deferred income taxes	–	(92)	(92)
Cash	14	–	14
Other net assets (liabilities)	(5)	–	(5)
Net identifiable assets (liabilities)	**24**	**313**	**337**
Goodwill			194
Purchase consideration			**531**

Goodwill represents a control premium and synergies that can be obtained from the Group's existing business. None of the goodwill recognised is expected to be deductible for income tax purposes. The fair value of other net assets (liabilities) includes receivables with a fair value of 15 million Swiss francs.

Directly attributable transaction costs of 4 million Swiss francs were incurred in these acquisitions. These are reported within general and administration expenses in the current period as part of the operating result of the Roche Pharmaceuticals (3 million Swiss francs) and Diagnostics operating segment (1 million Swiss francs).

Acquisitions – 2011: net cash outflow in millions of CHF

	Cash consideration paid	Cash in acquired company	Net cash outflow
Acquisitions – 2011	(450)	14	(436)
Contingent consideration paid on prior year acquisitions	(15)	–	(15)
Total	**(465)**	**14**	**(451)**

Contingent consideration arrangements

The Group is party to certain contingent consideration arrangements arising from previous business combination arrangements. The provisions for these arrangements are recorded as part of other provisions (see Note 24) and are set out in the table below.

Provisions for contingent consideration arrangements in millions of CHF

	2012	2011
At 1 January	153	132
Additional provisions created	3	1
Unused amounts reversed	(52)	(50)
Utilised during the year	(24)	(15)
Unwinding of discount	–	5
Business combinations		
– Verum	1	–
– PVT	–	31
– mtm laboratories	–	51
Currency translation effects	–	(2)
At 31 December	**81**	**153**
Expected outflow of resources		
– Within one year	28	45
– Between one and two years	3	55
– Between two and three years	50	53
– More than three years	–	–
Total	**81**	**153**

7. Global restructuring plans

During 2012 the Group initiated several major global restructuring plans. The costs incurred for the various plans are summarised in the table below, and details of the main elements of the plans are disclosed in the following text.

Global restructuring plans – 2012: costs incurred in millions of CHF

	Pharma R&D [1]	Diagnostics [2]	Pharma Informatics	Other plans [3]	Total
Global restructuring costs					
– Employee-related costs	188	91	46	161	486
– Site closure costs	381	63	–	125	569
– Other reorganisation expenses	27	26	3	325	381
Total global restructuring costs	**596**	**180**	**49**	**611**	**1,436**
Additional costs					
– Impairment of goodwill	–	187	–	–	187
– Impairment of intangible assets	46	29	–	112	187
– Legal and environmental costs	243	–	–	1	244
Total costs	**885**	**396**	**49**	**724**	**2,054**

1) Includes closure of the Nutley site and associated infrastructure and environmental remediation costs.
2) Includes restructuring of the Applied Science and Diabetes Care business areas.
3) Includes Operational Excellence (Pharmaceuticals and Diagnostics) and dalcetrapib (Pharmaceuticals).

Pharmaceuticals Division – Research and Development reorganisation

On 26 June 2012 the Group announced a streamlining of the research and development activities within the Pharmaceuticals Division. As part of this plan the US site in Nutley, New Jersey will be closed by the end of 2013, with a reduction in the workforce of approximately 1,000 people. The research and development activities currently undertaken at Nutley will be consolidated at existing sites in Switzerland and Germany and at the planned Translational Clinical Research Center at the Alexandria Centre for Life Science in Manhattan, US. The resulting savings from the global site consolidation and related infrastructure cost, the bundling of support functions as well as shifts in the portfolio allow the reallocation of resources to the growing number of clinical programmes. The Group will continue research and development activities in the United States through its Genentech organisation, which is based in South San Francisco and not affected by this reorganisation. Research and development activities in the Diagnostics Division and at Chugai are also not affected.

During 2012 costs of 885 million Swiss francs were incurred, based on latest estimates of the cost of the reorganisation. Of this amount, 188 million Swiss francs were provisions for severance payments and other employee-related costs, net of estimated curtailment gains. A charge of 381 million Swiss francs was recorded for impairments of property, plant and equipment at the Nutley site.

In addition environmental remediation costs of 243 million Swiss francs were recorded based on the initial estimates of the additional remediation activities that may be needed before the Nutley site can be sold. Impairment charges to intangible assets of 46 million Swiss francs were recorded as a result of portfolio prioritisation decisions linked to this reorganisation (see Note 13).

Diagnostics Division – Applied Science and Diabetes Care restructuring

Initiatives were announced in 2012 for the Applied Science and Diabetes Care businesses, which include streamlining the product portfolio, consolidating research and development activities and increasing the efficiency of marketing and distribution operations. In total, costs of 180 million Swiss francs were incurred in 2012, which relate to employee termination and site closure costs. In addition, goodwill impairment charges of 187 million Swiss francs were incurred for the full write-off of the goodwill from the 2007 NimbleGen acquisition, resulting from the decision to exit the Microarray business as part of the reorganisation of the Applied Science business area (see Note 12) and 29 million Swiss francs for the impairment of intangible assets in this business area (see Note 13).

Pharmaceuticals Division – Global informatics reorganisation

In the first half of 2012 the Pharmaceuticals Division announced a reorganisation of the global informatics function within the division. Costs of 49 million Swiss francs were incurred, which mainly consisted of severance payments and other employee-related costs.

Other global restructuring plans

On 17 November 2010 the Group announced the Operational Excellence global restructuring plan. The restructuring activities were substantially completed by the end of 2012 and incurred a total cost of 2.8 billion Swiss francs, of which 2.3 billion Swiss francs was incurred during 2010 and 2011 and 0.5 billion Swiss francs was incurred in 2012.

In 2012 costs of 484 million Swiss francs were incurred for the previously announced Operational Excellence programme, mainly for employee-related costs for sales force restructuring initiatives in the Pharmaceuticals Division, and employee-related and site closure costs in the Diagnostics Division in respect of the sites in Burgdorf, Switzerland and Graz, Austria. During 2011 costs of 940 million Swiss francs were incurred mainly for employee-related costs for restructuring initiatives and IT reorganisation costs in the Pharmaceuticals Division, the impairment of the manufacturing site at Boulder, Colorado (sold 31 August 2011), losses on the divestment of the research and development site in Madison, Wisconsin and the research site in Kulmbach, Germany. These costs were partially offset by a gain on the disposal of the site at Palo Alto, California (sold 13 June 2011).

In the second quarter of 2012 the Pharmaceuticals Division initiated a detailed review following the announcement of the results of the second interim analysis of the dalcetrapib dal-OUTCOMES Phase III trial and the subsequent termination of the dal-OUTCOMES trial and all the studies in the dal-HEART programme. Restructuring costs of 128 million Swiss francs were incurred, which consist of remaining trial costs and write-offs of inventories and property, plant and equipment. Additionally 112 million Swiss francs were expensed for the write-off of previously acquired intangible assets (see Note 13).

Global restructuring plans: summary of costs incurred in millions of CHF

	2012	2011
Employee-related costs		
– Termination costs	515	144
– Pensions and other post-employment benefits	(68)	(11)
– Other employee-related costs	39	33
Total employee-related costs	**486**	**166**
Site closure costs		
– Impairment of property, plant and equipment	440	80
– Accelerated depreciation of property, plant and equipment	33	66
– (Gains) losses on disposal of property, plant and equipment	16	(21)
– Other site closure costs	80	60
Total site closure costs	**569**	**185**
Divestment of products and businesses		
– Impairment of net assets-held-for-sale	–	117
– (Gains) losses on divestment of businesses [23]	–	105
Total costs on divestment of products and businesses	**–**	**222**
Other reorganisation expenses	381	367
Total global restructuring costs	**1,436**	**940**
Additional costs		
– Impairment of goodwill [12]	187	–
– Impairment of intangible assets [13]	187	–
– Legal and environmental costs [24]	244	–
Total costs	**2,054**	**940**

Global restructuring plans: classification of costs in millions of CHF

	2012			2011		
	Depreciation, amortisation and impairment	Other costs	Total	Depreciation, amortisation and impairment	Other costs	Total
Cost of sales						
– Pharmaceuticals	32	60	92	46	121	167
– Diagnostics	39	93	132	4	23	27
Marketing and distribution						
– Pharmaceuticals	–	63	63	–	65	65
– Diagnostics	2	76	78	–	5	5
Research and development						
– Pharmaceuticals	273	374	647	83	79	162
– Diagnostics	10	65	75	–	22	22
General and administration						
– Pharmaceuticals	304	162	466	130	326	456
– Diagnostics	187	50	237	–	18	18
– Corporate	–	264	264	–	18	18
Total	**847**	**1,207**	**2,054**	**263**	**677**	**940**
Total by operating segment						
– Roche Pharmaceuticals	609	659	1,268	259	591	850
– Chugai	–	–	–	–	–	–
– Diagnostics	238	284	522	4	68	72
– Corporate	–	264	264	–	18	18
Total	**847**	**1,207**	**2,054**	**263**	**677**	**940**

8. Employee benefits

Employee remuneration in millions of CHF

	2012	2011
Wages and salaries	8,410	7,761
Social security costs	888	831
Defined contribution post-employment plans[9]	313	303
Operating expenses for defined benefit post-employment plans[8]	280	334
Equity compensation plans[10]	363	371
Termination costs[7]	515	144
Other employee benefits	485	491
Employee remuneration included in operating results	**11,254**	**10,235**
Expected return on plan assets for defined benefit post-employment plans[9]	(514)	(500)
Interest cost for defined benefit post-employment plans[9]	576	565
Total employee remuneration	**11,316**	**10,300**

Other employee benefits consist mainly of life insurance schemes and certain other insurance schemes providing medical coverage and other long-term and short-term disability benefits. The charges for employee benefits in the operating results are included in the relevant expenditure line by function. The expected return on plan assets and interest cost from defined benefit plans are included as part of financial income and financing costs, respectively (see Note 4).

9. Pensions and other post-employment benefits

The Group's objective is to provide attractive and competitive post-employment benefits to employees, while at the same time ensuring that the various plans are appropriately financed and managing any potential impacts on the Group's long-term financial position. Most employees are covered by pension plans sponsored by Group companies. The nature of such plans varies according to legal regulations, fiscal requirements and market practice in the countries in which the employees are employed. Other post-employment benefits consist mostly of post-retirement healthcare and life insurance schemes, principally in the United States. Post-employment benefit plans are classified for IFRS as 'defined contribution plans' if the Group pays fixed contributions into a separate fund or to a third-party financial institution and will have no further legal or constructive obligation to pay further contributions. All other plans are classified as 'defined benefit plans', even if the Group's potential obligation is relatively minor or has a relatively remote possibility of arising. Consequently most of the Group's post-employment benefit plans are classified as 'defined benefit plans' for the purpose of these financial statements.

Defined contribution plans

Defined contribution plans typically consist of payments by employees and by the Group to funds administered by third parties. Payments by the Group were 313 million Swiss francs (2011: 303 million Swiss francs). No assets or liabilities are recognised in the Group's balance sheet in respect of such plans, apart from regular prepayments and accruals of the contributions withheld from employees' wages and salaries and of the Group's contributions.

Defined benefit plans

The Group's major defined benefit plans are located in Switzerland, the United States, Germany, the United Kingdom and Japan. Plans are usually established as trusts independent of the Group and are funded by payments from the Group and by employees. In some cases, notably for the major defined benefit plans in Germany, the plans are unfunded and the Group pays pensions to retired employees directly from its own financial resources.

Current and past service costs are charged to the appropriate income statement heading within the operating results. Pension plan administration and funding is overseen at a corporate level, and any settlement gains and losses resulting from changes in funding arrangements are reported as general and administration expenses within the Corporate segment. The expected returns on plan assets and interest costs are charged to financial income and financing costs, respectively. Actuarial gains and losses are recorded directly in other comprehensive income. The recognition of pension assets is limited to the total of the present value of any future refunds from the plans or reductions in future contributions to the plans and any cumulative unrecognised past service costs. Adjustments arising from the limit on the recognition of assets for defined benefit plans are recorded directly in other comprehensive income.

Defined benefit plans: income statement in millions of CHF

	2012			2011		
	Pension plans	Other post-employment benefit plans	Total	Pension plans	Other post-employment benefit plans	Total
Current service cost	336	15	351	328	13	341
Past service cost	(3)	8	5	(8)	16	8
(Gain) loss on curtailment	(63)	(13)	(76)	(15)	–	(15)
(Gain) loss on settlement	–	–	–	–	–	–
Total operating expenses	**270**	**10**	**280**	**305**	**29**	**334**
Expected return on plan assets	(483)	(31)	(514)	(471)	(29)	(500)
Interest cost	528	48	576	519	46	565
Total financial (income) expense	**45**	**17**	**62**	**48**	**17**	**65**
Total expense recognised in income statement	**315**	**27**	**342**	**353**	**46**	**399**

The funding of the Group's various defined benefit plans is overseen at a corporate level. Qualified independent actuaries carry out valuations on a regular basis and for major plans annually as at the reporting date. For funded plans, which are usually trusts independent of the Group's finances, the net asset/liability recognised on the Group's balance sheet corresponds to the over/under funding of the plan, adjusted for unrecognised past service costs. For unfunded plans, where the Group meets the pension obligations directly from its own financial resources, a liability for the defined benefit obligation is recorded in the Group's balance sheet. Pension assets and liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan. Amounts recognised in the balance sheet for post-employment benefits are predominantly non-current and are reported in non-current assets and liabilities.

Defined benefit plans: funding status in millions of CHF

	2012			2011		
	Funded plans	Unfunded plans	Total	Funded plans	Unfunded plans	Total
Fair value of plan assets	11,214	–	11,214	10,622	–	10,622
Defined benefit obligation	(13,824)	(4,090)	(17,914)	(12,428)	(3,249)	(15,677)
Over (under) funding	**(2,610)**	**(4,090)**	**(6,700)**	**(1,806)**	**(3,249)**	**(5,055)**
Unrecognised past service costs	(6)	(14)	(20)	(9)	(15)	(24)
Limit on asset recognition	(7)	–	(7)	(10)	–	(10)
Reimbursement rights	142	–	142	137	–	137
Net recognised asset (liability)	**(2,481)**	**(4,104)**	**(6,585)**	**(1,688)**	**(3,264)**	**(4,952)**
Reported in balance sheet						
Post-employment benefit assets	668	–	668	568	–	568
Post-employment benefit liabilities	(3,149)	(4,104)	(7,253)	(2,256)	(3,264)	(5,520)
Net recognised asset (liability)	**(2,481)**	**(4,104)**	**(6,585)**	**(1,688)**	**(3,264)**	**(4,952)**

Further detailed information on plan assets and the defined benefit obligation is given below.

Defined benefit plans: fair value of plan assets and reimbursement rights in millions of CHF

	Fair value of plan assets		Reimbursement rights	
	2012	2011	2012	2011
At 1 January	10,622	10,667	137	104
Expected return on plan assets	507	494	7	6
Actuarial gains (losses)	385	(474)	11	21
Currency translation effects and other	(173)	53	(4)	1
Employer contributions	307	293	(7)	–
Employee contributions	80	73	–	–
Benefits paid – funded plans	(514)	(484)	–	–
Past service cost	–	–	–	5
Divestment of subsidiaries	–	–	–	–
Curtailments	–	–	(2)	–
Settlements	–	–	–	–
At 31 December	**11,214**	**10,622**	**142**	**137**

Defined benefit plans: composition of plan assets in millions of CHF

	2012	2011
Shares and other equity instruments	4,232	3,738
Bonds, debentures and other debt instruments	4,244	3,865
Property	1,182	1,160
Cash and other investments	1,403	1,758
Roche Group non-voting equity securities	107	90
Roche Group debt instruments	44	11
Roche Group shares	2	–
Total	**11,214**	**10,622**

Other investments consist mainly of equity funds, alternatives, mortgages, commodities and insurance policies.

Defined benefit plans: defined benefit obligation in millions of CHF

	2012			2011		
	Pension plans	Other post-employment benefit plans	Total	Pension plans	Other post-employment benefit plans	Total
At 1 January	14,546	1,131	15,677	13,620	924	14,544
Current service cost	336	15	351	328	13	341
Interest cost	528	48	576	519	46	565
Employee contributions	80	–	80	73	–	73
Actuarial (gains) losses	2,173	31	2,204	578	153	731
Currency translation effects and other	(220)	(32)	(252)	23	15	38
Benefits paid – funded plans	(479)	(35)	(514)	(450)	(34)	(484)
Benefits paid – unfunded plans	(125)	(14)	(139)	(124)	(13)	(137)
Past service cost	–	9	9	(6)	27	21
Divestment of subsidiaries	–	–	–	–	–	–
Curtailments	(63)	(15)	(78)	(15)	–	(15)
Settlements	–	–	–	–	–	–
At 31 December	**16,776**	**1,138**	**17,914**	**14,546**	**1,131**	**15,677**

Actuarial assumptions

Actuarial assumptions are unbiased and mutually compatible estimates of variables that determine the ultimate cost of providing post-employment benefits. They are set on an annual basis by local management and actuaries and are subject to approval by corporate management and the Group's actuaries. Actuarial assumptions consist of demographic assumptions on matters such as mortality and employee turnover, and financial assumptions on matters such as interest rates, returns on investments, salary and benefit levels, inflation rates and costs of medical benefits. The Group operates defined benefit plans in many countries and the actuarial assumptions vary based upon local economic and social conditions.

Demographic assumptions. The most significant demographic assumptions relate to mortality rates. The Group's actuaries use mortality tables which take into account historic patterns and expected changes, such as further increases in longevity.

Mortality tables used for the major schemes

Country	Mortality table
Germany	Heubeck tables 2005G
Japan	MHLW2009
Switzerland	BVG 2010 generational tables
United Kingdom	S1NA_L rated up by 0.5 years for female non-pensioners and 1.5 years for all other members. Future improvements: CMI 2011 Core projection with a 1.25% long-term improvement
United States	RP2000 projected 17 years

Rates of employee turnover, disability and early retirement are based on historical behaviour within Group companies.

Financial assumptions. These are based on market expectations for the period over which the obligations are to be settled. The ranges of assumptions used in the actuarial valuations of the most significant plans, which are in countries with stable currencies and interest rates, are shown below.

Defined benefit plans: financial actuarial assumptions

	2012		2011	
	Weighted average	Range	Weighted average	Range
Discount rates	3.01%	1.70%–6.70%	3.80%	1.80%–8.00%
Expected rates of return on plan assets	4.78%	0.83%–8.75%	4.83%	1.28%–8.70%
Expected rates of salary increases	3.05%	2.00%–5.25%	3.18%	2.00%–5.30%
Expected rates of pension increases	1.11%	0.25%–3.50%	1.08%	0.25%–3.50%
Expected inflation rates	2.60%	2.00%–4.00%	2.64%	2.00%–4.00%
Immediate medical cost trend rate	7.59%	7.10%–7.60%	7.79%	7.40%–7.80%
Ultimate medical cost trend rate (in 2029)	4.50%	4.50%	4.50%	4.50%

Discount rates, which are used to calculate the discounted present value of the defined benefit obligation, are determined with reference to market yields on high-quality corporate bonds, or government bonds in countries where there is not a deep market in corporate bonds. The currency and term of the bonds are consistent with the obligation being discounted. The interest cost included in the income statement is calculated by multiplying the discount rate by the defined benefit obligation.

Defined benefit plans: sensitivity of discount rate in millions of CHF

	2012		2011	
	+0.25%	−0.25%	+0.25%	−0.25%
Current service cost and interest cost	(2)	1	(7)	5
Defined benefit obligation	(710)	640	(525)	561

Expected returns on plan assets are based on market expectations of expected returns on the assets in funded plans over the duration of the related obligation. This takes into account the split of the plan assets between equities, bonds, property and other investments. The calculation includes assumptions concerning expected dividend and interest income, realised and unrealised gains on plan assets and taxes and administration costs borne by the plan. These are based on long-term market expectations and the actual performance is continually monitored by corporate management. Due to the long-term nature of the obligations, the assumptions used for matters such as returns on investments may not necessarily be consistent with recent historical patterns. The expected return on plan assets included in the income statement is calculated by multiplying the expected rate of return by the fair value of plan assets. The difference between the expected return and the actual return in any twelve-month period is an actuarial gain/loss and is recorded directly to other comprehensive income. The actual return on plan assets was a gain of 892 million Swiss francs (2011: gain of 20 million Swiss francs).

Expected rates of salary increases, which are used to calculate the defined benefit obligation and the current service cost included in the income statement, are based on the latest expectation and historical behaviour within Group companies. Expected inflation rates are derived by looking at the level of inflation implied by the financial markets in conjunction with the economists' price inflation forecasts, historic price inflation as well as other economic variables and circumstances.

Medical cost trend rates are used to calculate the defined benefit obligation and the current service cost included in the income statement of post-employment medical plans. These take into account the benefits set out in the plan terms and expected future changes in medical costs. Since the Group's major post-employment medical plans are for US employees, these rates are driven by developments in the United States. The effect of one percentage point increase or decrease in the medical cost trend rate is shown below.

Defined benefit plans: sensitivity of medical cost trend rate in millions of CHF

	2012		2011	
	+1%	−1%	+1%	−1%
Current service cost and interest cost	9	(8)	8	(6)
Defined benefit obligation	168	(113)	134	(108)

Historical summary

A five-year summary of the Group's defined benefit plans is shown in the table below.

Defined benefit plans: historical information in millions of CHF

	2012	2011	2010	2009	2008
Funded plans					
– Fair value of plan assets	11,214	10,622	10,667	10,530	9,438
– Defined benefit obligation	(13,824)	(12,428)	(11,464)	(11,267)	(10,504)
Over (under) funding	**(2,610)**	**(1,806)**	**(797)**	**(737)**	**(1,066)**
Unfunded plans					
– Defined benefit obligation	(4,090)	(3,249)	(3,080)	(3,486)	(3,078)
Experience adjustments	385	(474)	249	691	(2,787)
Actuarial gains (losses) in plan assets	**385**	**(474)**	**249**	**691**	**(2,787)**
Experience adjustments	(111)	1	218	(33)	(126)
Change in actuarial assumptions	(2,093)	(732)	(802)	(760)	115
Actuarial gains (losses) in plan liabilities	**(2,204)**	**(731)**	**(584)**	**(793)**	**(11)**

Cash flows

The Group incurred cash flows from its defined benefit plans as shown in the table below.

Defined benefit plans: cash flows in millions of CHF

	2012	2011
Employer contributions, net of reimbursements – funded plans	(300)	(293)
Benefits paid – unfunded plans	(139)	(137)
Total cash inflow (outflow)	**(439)**	**(430)**