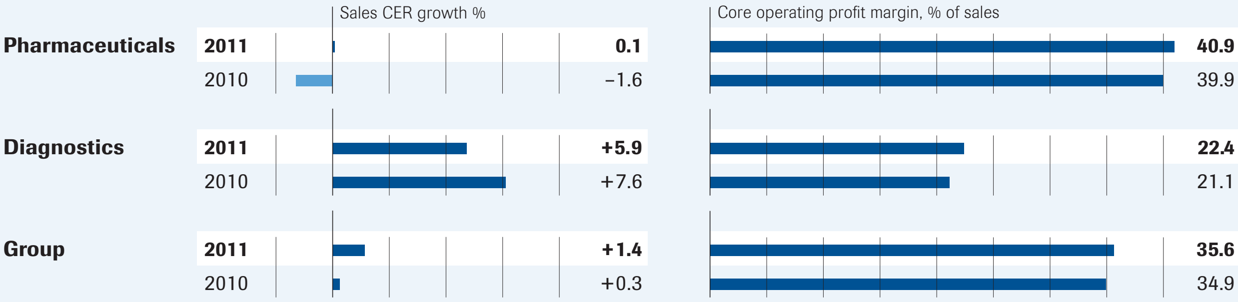
Finance Report

2011

Finance in brief

Key results



	2011 (mCHF)	2010 (mCHF)	(CHF)	% change (CER)	2011	% of sales 2010
IFRS results						
Sales	42,531	47,473	–10	+1		
Operating profit	13,454	13,486	0	+17	31.6	28.4
Net income	9,544	8,891	+7	+26	22.4	18.7
Net income attributable to Roche shareholders	9,343	8,666	+8	+26		
Diluted EPS (CHF)	10.98	10.11	+9	+25		
Dividend per share (CHF) [1]	6.80	6.60	+3			
Core results						
Research and development	8,073	9,050	–11	–1	19.0	19.1
Core operating profit	15,149	16,591	–9	+6	35.6	34.9
Core EPS (CHF)	12.30	12.78	–4	+11		
Free cash flow						
Operating free cash flow	13,733	14,149	–3	+14	32.3	29.8
Free cash flow	3,904	4,699	–17	+21	9.2	9.9

	2011 (mCHF)	2010 (mCHF)	(CHF)	% change (CER)
Net debt	(15,566)	(19,157)	–19	–18
Capitalisation	41,335	41,720	–1	–1
– Debt	26,853	30,058	–11	–11
– Equity	14,482	11,662	+24	+27

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 2011 and 2010 results at constant currencies (the average rates for the year ended 31 December 2010). This is the same concept that was previously labelled as 'Local currencies' by the Group.

Core results and Core EPS (Earnings Per Share): These exclude non-core items such as global restructuring charges and amortisation and impairment of 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 – 2011 in brief

Roche in 2011	**The Roche Group** posted solid overall results in a challenging market in 2011. Core operating profit grew faster than sales, and Core Earnings per Share increased by 11% at constant exchange rates (CER). The appreciation of the Swiss franc against all major currencies had a significant impact on the results expressed in Swiss francs. However, the underlying currency exposure is mitigated by the large majority of the cost base located outside of Switzerland.
Sales	**Group sales** increased slightly by 1% (CER) to 42.5 billion Swiss francs (–10% at reported exchange rates). Excluding Tamiflu, Group sales grew by 2% (CER). **Pharmaceutical sales** growth, excluding Tamiflu, was 1% (CER). The strong growth in key oncology products, Lucentis in ophthalmology and Actemra/RoActemra in rheumatoid arthritis was largely offset by the impacts of the US healthcare reforms, European austerity measures, price cuts in Japan during 2010 and lower Avastin sales in the US and in Western Europe. **Diagnostics sales** grew by 6% (CER), significantly ahead of market with Professional Diagnostics and Tissue Diagnostics being the major contributors.
Operating results	**Core operating profit** increased by 6% (CER) to 15.1 billion Swiss francs (–9% at reported exchange rates). The cost savings from the Operational Excellence programme initiated in 2010 offset the substantially lower profit contribution from Avastin and Tamiflu as well as the impacts from healthcare reforms, price pressure and patent expiry. **Research and development** expenditure declined by 1% (CER) to 8.1 billion Swiss francs on a core basis, primarily driven by project prioritisation and savings from Operational Excellence. R&D costs are 19% of Group sales. **IFRS operating results** include restructuring charges from the Operational Excellence programme of 0.9 billion Swiss francs.
Non-operating results	**Core net financial expenses** decreased by 0.7 million Swiss francs primarily due to lower interest expenses resulting from the continued repayment of the debt taken out in 2009 to finance the Genentech transaction.
Net income	**IFRS net income** increased by 26% (CER) to 9.5 billion Swiss francs (+7% at reported exchange rates), primarily driven by the strong operating result, lower restructuring charges, lower interest expenses and a lower tax rate. **Core Earnings per Share** increased by 11% in constant currencies (–4% at reported exchange rates).
Cash flows	**Operating free cash flow** of 13.7 billion Swiss francs, up 14% CER. **Free cash flow** of 3.9 billion Swiss francs, up 21% CER. **Repayment of debt** is ahead of schedule with 42% of the notes and bonds issued in 2009 to finance the Genentech transaction being repaid by the end of 2011.
Financial position	**Net working capital** increased by 5%, reflecting higher levels of trade receivables within the public sector customers of certain Southern European countries. **Net debt** position improved by 3.6 billion Swiss francs to 15.6 billion Swiss francs. **Credit ratings** position strong: Moody's at A1, upgraded from A2 during the second half of 2011, and Standard & Poor's at AA–.
Shareholder return	**Dividends** are proposed to increase by 3%. This will represent the 25th consecutive year of dividend growth and will result in an increased pay-out ratio of 55.3%, subject to AGM approval. **Total Shareholder Return (TSR)** increased by 22% representing a combined performance of share and non-voting equity security.

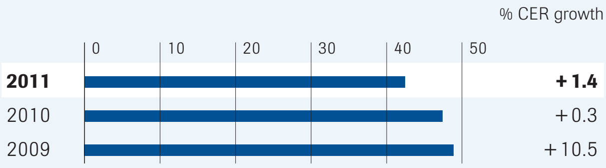
ROCHE GROUP

ROCHE HOLDING LTD, BASEL

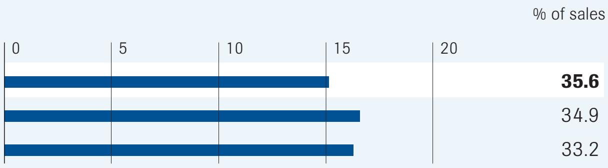
Financial Review

Roche Group results

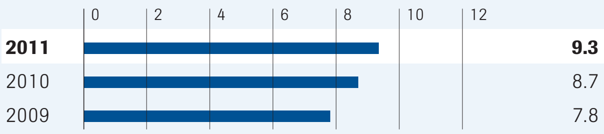
Sales in billions of CHF



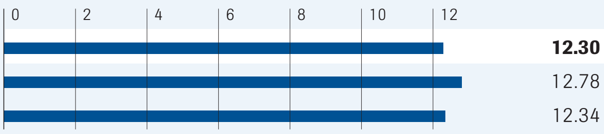
Core operating profit in billions of CHF



Net income attributable to Roche shareholders in billions of CHF



Core EPS in CHF



In 2011 the Roche Group's net income increased by 26% at constant exchange rates. This was driven by a solid operating performance in both the Pharmaceuticals and Diagnostics businesses. Costs for restructuring were less than in 2010, and financing costs and the tax rate were also lower. The cost savings from the Operational Excellence programme initiated in 2010 offset the substantially lower profit contribution from reduced sales of Tamiflu and Avastin, as well as the impacts from healthcare reforms, price pressure and patent expiry.

The strengthening of the Swiss franc against all major currencies on average year-to-date basis had a significant negative impact on the results expressed in Swiss francs. However the underlying currency translation exposure arising from non-Swiss franc revenues is mitigated by the majority of the Group's cost base being located outside Switzerland. In 2011 the Group's net income increased by 26% at constant exchange rates, but increased by only 7% when translated on consolidation into Swiss francs.

Core EPS, which excludes non-core items such as global restructuring charges and amortisation and impairment of intangible assets, increased by 11% at constant exchange rates (decrease of 4% when translated into Swiss francs).

Income statement

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	42,531	47,473	–10	+1
Royalties and other operating income	1,582	1,694	–7	+7
Cost of sales	(11,942)	(13,293)	–10	0
Marketing and distribution	(8,049)	(9,488)	–15	–5
Research and development	(8,326)	(10,026)	–17	–8
General and administration	(2,342)	(2,874)	–19	–11
Operating profit	**13,454**	**13,486**	**0**	**+17**
Associates	12	(3)	–	–
Financial income	647	557	+16	+28
Financing costs	(2,228)	(2,829)	–21	–10
Profit before taxes	**11,885**	**11,211**	**+6**	**+24**
Income taxes	(2,341)	(2,320)	+1	+18
Net income	**9,544**	**8,891**	**+7**	**+26**
Attributable to				
– Roche shareholders	9,343	8,666	+8	+26
– Non-controlling interests	201	225	–11	+2
Diluted EPS (CHF)	10.98	10.11	+9	+25
Core results				
Sales	42,531	47,473	–10	+1
Royalties and other operating income	1,582	1,694	–7	+7
Cost of sales	(11,117)	(12,511)	–11	–1
Marketing and distribution	(7,967)	(9,167)	–13	–2
Research and development	(8,073)	(9,050)	–11	–1
General and administration	(1,807)	(1,848)	–2	+6
Operating profit	**15,149**	**16,591**	**–9**	**+6**
Associates	12	(3)	–	–
Financial income	647	557	+16	+28
Financing costs	(2,228)	(2,829)	–21	–10
Profit before taxes	**13,580**	**14,316**	**–5**	**+10**
Income taxes	(2,895)	(3,135)	–8	+7
Net income	**10,685**	**11,181**	**–4**	**+11**
Attributable to				
– Roche shareholders	10,470	10,955	–4	+11
– Non-controlling interests	215	226	–5	+8
Core EPS (CHF)	12.30	12.78	–4	+11

Sales

Sales increased slightly by 1% in constant currencies (–10% in Swiss francs; +5% in US dollars) to 42.5 billion Swiss francs. Excluding Tamiflu, sales increased by 2% in constant currencies. The Pharmaceuticals Division represented 77% of Group sales and the Diagnostics Division contributed 23%.

Sales in the Pharmaceuticals Division were stable in constant currencies at 32.8 billion Swiss francs. Excluding Tamiflu, the increase was 1%. Demand for the oncology drugs Herceptin, MabThera/Rituxan, Xeloda and Tarceva continued to grow strongly. Additional major growth drivers were Lucentis in ophthalmology, Actemra/RoActemra in rheumatoid arthritis and Mircera in renal anemia. These positive factors mostly offset the expected declines in sales of Tamiflu and Avastin, and patent expiry effects for NeoRecormon/Epogin, Bonviva/Boniva and CellCept. There were continuing negative impacts from the US healthcare reforms, European austerity measures and price cuts in Japan. The Diagnostics Division sales were 9.7 billion Swiss francs, growing 6% in constant currencies (–7% in Swiss francs; +10% in US dollars), thereby strengthening its leading market position. Major growth areas were Professional Diagnostics (up 9%) and Tissue Diagnostics (up 15%).

Divisional operating results for 2011

	Pharmaceuticals (mCHF)	Diagnostics (mCHF)	Corporate (mCHF)	Group (mCHF)
Sales	32,794	9,737	–	42,531
Core operating profit	13,406	2,178	(435)	15,149
– margin, % of sales	40.9	22.4	–	35.6
Operating profit	12,251	1,656	(453)	13,454
– margin, % of sales	37.4	17.0	–	31.6
Operating free cash flow	12,914	1,259	(440)	13,733
– margin, % of sales	39.4	12.9	–	32.3

Divisional operating results – Development of results compared to 2010

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales				
– % increase CER	0	+6	–	+1
Core operating profit				
– % increase CER	+5	+14	+15	+6
– margin: percentage point increase	+2.1	+1.6	–	+1.8
Operating profit				
– % increase in CER	+16	+22	+17	+17
– margin: percentage point increase	+5.3	+2.3	–	+4.3
Operating free cash flow				
– % increase in CER	+16	–7	+8	+14
– margin: percentage point increase	+5.6	–1.9	–	+3.7

Core operating results

On a core basis, the Group's operating profit increased by 6% at constant exchange rates (decreased 9% in Swiss francs), while sales increased by 1% at CER. The core operating profit margin of both divisions increased, with the increase in profitability being driven by the Operational Excellence programme and resource prioritisation, particularly in marketing and distribution and research and development. The Operational Excellence programme led to a decline in marketing and distribution expenses and in research and development costs in constant currencies. The strong Swiss franc had a negative effect on the margin developments of 1.1 percentage points on Group level, a 1.1 percentage point on Pharmaceutical Division and 0.3 of a percentage point for the Diagnostics Division.

The Pharmaceuticals Division increased its core operating profit by 5% in constant currencies, driven by growth of the underlying business, resource prioritisation and Operational Excellence cost savings. Further efficiency improvements in general and administration costs were more than offset by 149 million Swiss francs of expenses for the new Branded Pharmaceutical Product Fee in the US, part of the US healthcare reforms. Core operating profit growth in the Diagnostics Division was 14% in constant currencies, mainly resulting from sales growth and various productivity improvement programmes. The increase of general and administration costs in Corporate of 15% is due to the shift of certain Finance functions from the Pharmaceuticals Division to Corporate.

Operational Excellence

On 17 November 2010 the Group announced the details of the Operational Excellence programme. The costs recognised in 2011 of 0.9 billion Swiss francs mainly relate to site closure and disposal costs in the Pharmaceutical business. Site closure and disposal costs totalled 407 million Swiss francs and were primarily due to the divestments of the sites at Palo Alto (California), Boulder (Colorado), Madison (Wisconsin) and Kulmbach (Germany). In the first half of 2011 the Group announced that it will not divest the chemical production facility in Florence (South Carolina) given the unfavourable market for chemical production assets and the Group's expected future capacity requirements for small molecules. The Pharmaceuticals Division accounts for 850 million Swiss francs of these costs and 72 million Swiss francs relate to the Diagnostics Division.

East Japan Earthquake

The earthquake on 11 March 2011 damaged the Chugai production plant at Utsunomiya. Production there was temporarily halted and was fully resumed by the end of August 2011. 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 sales employees diverted to ensure continued product supply and information flow for customers. These factors had a certain negative impact on Chugai's sales and profits in the second half of 2011. Total costs incurred for write-offs of property, plant and equipment and inventories at Chugai in 2011 were 57 million Swiss francs, net of amounts received from insurance. The earthquake also resulted in temporary interruptions in the supply of instruments by Hitachi, a key supplier to the Roche Professional Diagnostics business.

Treasury and taxation

Financial income was 0.6 billion Swiss francs, an increase of 28% at constant exchange rates, mainly due to foreign currency devaluation effects in Venezuela in both 2011 and 2010. Financing costs were 2.2 billion Swiss francs, a decrease of 0.6 billion Swiss francs, with interest costs being 10% lower at CER as debt is repaid. Tax expenses increased by 7% to 2.9 billion Swiss francs. However, the Group's effective core tax rate decreased to 21.3% compared to 21.9% in 2010, mainly due to the lower tax rate in Basel, Switzerland, and the relatively lower percentage profit contribution from higher-tax jurisdictions.

Net income and Earnings per share

Net income increased by 26% at constant exchange rates driven by a solid operating performance, lower financing costs and a lower tax rate and by overall lower non-core items such as no global restructuring charges for Genentech integration in 2011 and lower charges for the Operational Excellence initiative. On a core basis, net income was 11% higher.

The increase in diluted EPS of 25% (CER) was due to the increase in net income, as described above. The Core EPS, which excludes non-core items such as global restructuring charges and amortisation and impairment of intangible assets, increased by 11% at constant exchange rates (decreased 4% in Swiss francs). 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

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals				
Net working capital	5,445	5,766	–6	–3
Long-term net operating assets	14,563	14,595	0	–1
Diagnostics				
Net working capital	3,501	3,025	+16	+20
Long-term net operating assets	12,022	12,025	0	+1
Corporate				
Net working capital	(42)	(45)	–7	–9
Long-term net operating assets	2	3	–33	+185
Net operating assets	**35,491**	**35,369**	**0**	**+1**
Net debt	(15,566)	(19,157)	–19	–18
Pensions	(4,952)	(3,808)	+30	+30
Income taxes	174	(386)	–	–
Other non-operating assets, net	(665)	(356)	+87	+68
Total net assets	**14,482**	**11,662**	**+24**	**+27**

During the first half of 2011 the Swiss franc strengthened against many currencies. Following the intervention of the Swiss Central Bank this trend reversed in the second half of 2011. Overall these currency translation effects largely netted out on balance sheet carrying values when consolidated into Swiss francs. In the Pharmaceuticals Division net working capital decreased by 3% in constant currencies despite increased trade receivables within the public sector customers of some Southern European countries, particularly Spain and Portugal, and continued sales growth in China. Long-term net operating assets decreased by 1% in constant currencies as utilisation of provisions created for the Operational Excellence restructuring programme were more than offset by lower property, plant and equipment following various site disposals. In Diagnostics the increase in net working capital of 20% in constant currencies was driven by build-ups in trade receivable in certain Southern European countries, increased inventory levels due to product launches and the build-up of Hitachi-sourced instruments after the earthquake in Japan. The long-term net operating assets in constant currencies increased by 1% as the creation of provisions has been partially offset by higher levels of property, plant and equipment.

The improvement in the net debt position was mainly due to the free cash flow of 3.9 billion Swiss francs, as described below. For pensions the increase in the net pension liability reflects falling interest rates leading to the discounted defined benefit obligation being higher.

Free cash flow

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals	12,914	12,933	0	+16
Diagnostics	1,259	1,634	–23	–7
Corporate	(440)	(418)	+5	+8
Operating free cash flow	**13,733**	**14,149**	**–3**	**+14**
Treasury activities	(1,493)	(1,396)	+7	+25
Taxes paid	(2,594)	(2,789)	–7	+5
Dividends paid	(5,742)	(5,265)	+9	+9
Free cash flow	**3,904**	**4,699**	**–17**	**+21**

The Group's operating free cash flow remained strongly positive at 13.7 billion Swiss francs. There was an increase of 14% in constant currencies (–3% in Swiss francs), driven by strong operating results partly offset by increases in net working capital. Proceeds from site divestments and lower capital expenditure also contributed to the growth in operating free cash flow. The free cash flow in 2011 decreased by 0.8 billion Swiss francs to 3.9 billion Swiss francs. This was primarily due to the lower free cash flow in Swiss franc terms and higher dividend payments.

Pharmaceuticals Division operating results

Pharmaceuticals Division operating results

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	32,794	37,058	–12	0
Royalties and other operating income	1,453	1,537	–5	+9
Cost of sales	(7,436)	(8,169)	–9	+1
Marketing and distribution	(5,636)	(6,964)	–19	–9
Research and development	(7,397)	(9,090)	–19	–10
General and administration	(1,527)	(2,071)	–26	–18
Operating profit	**12,251**	**12,301**	**0**	**+16**
– margin, % of sales	37.4	33.2	+4.2	+5.3
Core results [1]				
Sales	32,794	37,058	–12	0
Royalties and other operating income	1,453	1,537	–5	+9
Cost of sales	(7,053)	(7,947)	–11	–2
Marketing and distribution	(5,564)	(6,652)	–16	–6
Research and development	(7,173)	(8,160)	–12	–2
General and administration	(1,051)	(1,060)	–1	+10
Core operating profit	**13,406**	**14,776**	**–9**	**+5**
– margin, % of sales	40.9	39.9	+1.0	+2.1
Financial position				
Net working capital	5,445	5,766	–6	–3
Long-term net operating assets	14,563	14,595	0	–1
Net operating assets	**20,008**	**20,361**	**–2**	**–2**
Free cash flow				
Operating free cash flow	12,914	12,933	0	+16
– margin, % of sales	39.4	34.9	+4.5	+5.6

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

Sales overview

Pharmaceuticals Division – Sales by therapeutic area

Therapeutic area	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Oncology	19,210	21,252	+2	59	57
Inflammation/Autoimmune/Transplantation	2,816	2,950	+7	9	8
Virology	2,663	3,543	–16	8	10
Metabolism/Bone	2,015	2,568	–12	6	7
Ophthalmology	1,523	1,458	+23	5	4
Respiratory diseases	1,095	1,154	+10	3	3
Renal anemia	1,018	1,207	–9	3	3
Cardiovascular diseases	901	982	+4	3	3
Central nervous system	851	966	–2	2	3
Infectious diseases	355	422	–7	1	1
Other therapeutic areas	347	556	–31	1	1
Total sales	**32,794**	**37,058**	**0**	**100**	**100**

In 2011 Pharmaceuticals Division sales were stable in constant currencies with growth in most key products offsetting negative impacts from healthcare reforms, austerity measures, pricing pressures and expected decreases in sales of certain major medicines. Excluding Tamiflu, sales growth of the Pharmaceuticals Division was 1% in constant currencies and was primarily driven by five products: Herceptin, MabThera/Rituxan, Lucentis, Actemra/RoActemra and Mircera. These products represent 42% of the portfolio (2010: 37%) and together generated 1.7 billion Swiss francs of additional sales in 2011. This growth was partly offset by lower sales of Tamiflu, Avastin, NeoRecormon/Epogin, Bonviva/Boniva and CellCept. The US healthcare reforms, European austerity measures and a base effect from the Japanese biennial price cuts implemented in April 2010 had a combined incremental negative impact in 2011 of 295 million Swiss francs compared to 2010, equivalent to 1.2 percentage points on divisional sales growth.

Oncology continued to account for the majority of the division's sales, with continued growth in Herceptin and MabThera/Rituxan offsetting the expected decline in Avastin sales. In virology, sales of Tamiflu continued to decrease substantially, and while overall Pegasys sales declined for the year, they began to recover in the second half following US launches of new hepatitis C medicines that are used in combination with Pegasys. Sales in inflammation/autoimmune/transplantation increased in constant currencies due to 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

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Oncology					
Avastin	5,292	6,461	–7	16	17
Herceptin	5,253	5,429	+9	16	15
MabThera/Rituxan [1)]	5,027	5,363	+7	15	14
Xeloda	1,354	1,426	+8	4	4
Tarceva	1,251	1,325	+7	4	4
Neutrogin	278	331	–10	1	1
NeoRecormon/Epogin [2)]	222	333	–22	1	1
Others	533	584	0	2	1
Total Oncology	**19,210**	**21,252**	**+2**	**59**	**57**
Inflammation/Autoimmune/Transplantation					
CellCept	991	1,290	–14	3	3
MabThera/Rituxan [1)]	978	993	+13	3	3
Actemra/RoActemra	618	397	+73	2	1
Others	229	270	–5	1	1
Total Inflammation/Autoimmune/ Transplantation	**2,816**	**2,950**	**+7**	**9**	**8**
Virology					
Pegasys	1,438	1,645	–3	4	4
Valcyte/Cymevene	569	605	+7	2	2
Tamiflu	359	873	–53	1	2
Copegus	164	212	–14	1	1
Others	133	208	–28	0	1
Total Virology	**2,663**	**3,543**	**–16**	**8**	**10**
Metabolism/Bone					
Bonviva/Boniva	696	1,013	–22	2	3
Nutropin	317	405	–8	1	1
Xenical	238	337	–21	1	1
Evista	206	222	–1	1	1
Others	558	591	+2	1	1
Total Metabolism/Bone	**2,015**	**2,568**	**–12**	**6**	**7**
Ophthalmology					
Lucentis	1,523	1,458	+23	5	4
Total Ophthalmology	**1,523**	**1,458**	**+23**	**5**	**4**
Respiratory diseases					
Xolair	603	641	+11	2	2
Pulmozyme	492	513	+10	1	1
Total Respiratory diseases	**1,095**	**1,154**	**+10**	**3**	**3**
Renal anemia					
NeoRecormon/Epogin [2)]	674	952	–22	2	2
Mircera	344	255	+50	1	1
Total Renal anemia	**1,018**	**1,207**	**–9**	**3**	**3**

Pharmaceuticals Division – Sales *(continued)*

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Cardiovascular diseases					
Activase/TNKase	453	460	+15	2	1
Others	448	522	–7	1	2
Total Cardiovascular diseases	**901**	**982**	**+4**	**3**	**3**
Central nervous system					
Madopar	294	308	+6	1	1
Rivotril	187	218	–3	0	1
Others	370	440	–6	1	1
Total Central nervous system	**851**	**966**	**–2**	**2**	**3**
Infectious diseases					
Rocephin	265	311	–6	1	1
Others	90	111	–10	0	0
Total Infectious diseases	**355**	**422**	**–7**	**1**	**1**
Other therapeutic areas	**347**	**556**	**–31**	**1**	**1**
Total sales	**32,794**	**37,058**	**0**	**100**	**100**

1) Total MabThera/Rituxan sales of 6,005 million Swiss francs (2010: 6,356 million Swiss francs) split between oncology and Inflammation/Autoimmune/Transplantation franchises.
2) Total NeoRecormon/Epogin sales of 896 million Swiss francs (2010: 1,285 million Swiss francs) split between renal anemia and oncology franchises.

MabThera/Rituxan

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	2,722	3,026	+6	46	48
Western Europe	1,574	1,639	+7	26	26
Japan	254	273	–1	4	4
International	1,455	1,418	+14	24	22
Total sales	**6,005**	**6,356**	**+8**	**100**	**100**

MabThera/Rituxan: for non-Hodgkin's lymphoma (NHL), chronic lymphocytic leukemia (CLL), rheumatoid arthritis (RA) and ANCA-associated vasculitis. The sustained growth in the oncology segment was driven by continued strong uptake of the new first-line maintenance indication in follicular lymphoma (a type of NHL) in Europe and the US, and by further uptake in CLL. Sales growth of 14% in the International region, including key emerging markets such as China and Brazil, was mainly due to the continued uptake in NHL indications. Sales in the RA segment were 1.0 billion Swiss francs in 2011, an increase of 13% in constant currencies. Growth in this segment came from increased use in patients with an inadequate response to treatment with tumour necrosis factor inhibitors and also from shortened repeat treatment intervals.

Avastin

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	2,343	3,190	–14	44	49
Western Europe	1,448	1,762	–8	27	27
Japan	627	625	+7	12	10
International	874	884	+11	17	14
Total sales	**5,292**	**6,461**	**–7**	**100**	**100**

Avastin: for advanced colorectal, breast, lung, kidney and ovarian cancer, and for relapsed glioblastoma (a type of brain tumour). The significant decline in overall sales was mainly due to regulatory and reimbursement uncertainty in the US, beginning in 2010, regarding the use of Avastin for metastatic breast cancer. This led to lower sales in the US throughout 2011 and also affected uptake for breast cancer in certain European and Latin American markets. The US market share in all other indications remained stable. Lower sales in Europe were due primarily to government austerity measures and price cuts, along with lower use for breast cancer. Market penetration in colorectal cancer remained stable despite increasing competition. Use of the medicine in lung cancer grew slightly in a number of EU countries. The approval by the EU in December 2011 of Avastin for front-line treatment of newly diagnosed advanced ovarian cancer is expected to have a positive impact on sales in Europe from 2012 onwards. Growth of 11% in the International region reflects strong uptake of Avastin in its colorectal and lung cancer indications, led by Latin America (up 18%) and Asia–Pacific (up 34%), particularly in China following the launch for colorectal cancer in October 2010. Growth in Japan was driven by continued good uptake in non-small cell lung cancer. The new metastatic breast cancer indication, approved in Japan in September 2011, is also expected to contribute to future sales.

In November 2011 the US Food and Drug Administration issued a final decision revoking approval of Avastin for the treatment of metastatic breast cancer. This followed a recommendation in July 2010 by an FDA expert panel, the agency's initial notice of revocation in December 2010, and an appeal in 2011 by Roche and Genentech against removal of the indication. The FDA decision does not affect the medicine's other approved indications in the US and elsewhere. Avastin is currently approved in more than 80 markets worldwide, including the EU and (most recently) Japan, for breast cancer.

Herceptin

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	1,422	1,591	+5	27	29
Western Europe	1,941	2,075	+4	37	38
Japan	288	300	+2	5	6
International	1,602	1,463	+22	31	27
Total sales	**5,253**	**5,429**	**+9**	**100**	**100**

Herceptin: for HER2-positive breast cancer and HER2-positive metastatic (advanced) stomach cancer. Global sales growth was driven by expanded access in developing countries, together with increased and improved HER2 testing, and continued uptake in HER2-positive stomach cancer. The International region grew at 22%, with demand especially strong in Latin America and the Asia–Pacific region. Higher sales in the US primarily reflect good adoption of the medicine for stomach cancer. The increase in Western Europe was due mainly to uptake in stomach cancer and higher penetration in the elderly population in breast cancer, as well as enhanced penetration and quality of HER2 testing. Modest growth in Japan reflected a reduction in promotional activities following the earthquake in March. The main growth contribution came from sales in the HER2-positive breast cancer segment where Herceptin maintained its high market share. There was also initial uptake in the new stomach cancer indication, which was approved by the Japanese authorities in March 2011.

Lucentis

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	1,523	1,458	+23	100	100
Total sales	**1,523**	**1,458**	**+23**	**100**	**100**

Lucentis: for wet age-related macular degeneration (AMD) and macular edema following retinal vein occlusion (RVO). Sales in the US grew 23% in US dollar terms to 1.5 billion Swiss francs. The main factors were the growth of the AMD market and the new RVO indication. In April 2011 the one-year results from the Comparisons of Age-related macular degeneration Treatments Trial (CATT) were published, which compared Lucentis with off-label Avastin in patients with wet AMD. This had a limited impact on US sales growth. The total Lucentis patient share in the wet AMD segment remained stable in the US through the third and fourth quarters of 2011. This was due in part to reports in 2011 of safety concerns regarding unapproved intravitreal use of Avastin in wet AMD. Lucentis is marketed outside the United States by Novartis.

Pegasys

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	343	389	+4	24	24
Western Europe	297	352	–6	21	21
Japan	93	124	–21	6	8
International	705	780	–2	49	47
Total sales	**1,438**	**1,645**	**–3**	**100**	**100**

Pegasys: for hepatitis B and C. An overall sales decline in 2011 was partly offset by renewed sales growth in the second half of 2011 with an increase of 6% compared to the same period of 2010. This recovery followed the launches in mid-2011 of two new direct-acting hepatitis C medicines in the US (Merck's Victrelis and Vertex's Incivek). The new medicines are designed to be given with a pegylated interferon and ribavirin (a regimen known as triple combination therapy). As the leading pegylated interferon medication, Pegasys is well positioned to be the foundation for triple combination therapy. In Europe and elsewhere patients and their doctors have been delaying the start of hepatitis C treatment in anticipation of the availability and reimbursement of triple combination therapy, expected to increase in 2012. While these treatment deferrals have resulted in a contraction of the hepatitis C segment in most mature markets in recent years, Pegasys has continued to expand its leading market share in the US, key EU countries and Japan.

In 2011 Roche and Merck & Co. established strategic, non-exclusive agreements to improve the treatment, diagnosis and awareness of chronic hepatitis C. Under the agreements, Roche and Genentech will include Victrelis (boceprevir) as part of their promotion to healthcare professionals on the use of Pegasys in a triple combination regimen. The Pegasys pre-filled pen/ProClick Auto-Injector, which makes administering Pegasys even simpler, was approved in the EU and the US in 2011 and is now being rolled out.

Xeloda

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	517	530	+15	38	37
Western Europe	264	305	–3	20	21
Japan	112	128	–7	8	9
International	461	463	+11	34	33
Total sales	**1,354**	**1,426**	**+8**	**100**	**100**

Xeloda: for colorectal, stomach and breast cancer. Sales increased 8% in constant currencies to 1.4 billion Swiss francs. Growth was driven primarily by strong demand in the US, China and Brazil 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, while the decline in Japan was primarily due to the effects of the East Japan Earthquake.

Tarceva

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	484	523	+9	39	39
Western Europe	370	432	–4	30	33
Japan	92	94	+5	7	7
International	305	276	+23	24	21
Total sales	**1,251**	**1,325**	**+7**	**100**	**100**

Tarceva: for advanced non-small cell lung and pancreatic cancer. The overall sales increase was due primarily to strong growth in the International region, especially in China, Brazil and South Korea, driven by uptake in the second-line treatment of non-small cell lung cancer (NSCLC). Growth in the US reflects continued growth in the NSCLC first-line maintenance indication and growth in the second-line NSCLC segment. In the highly competitive Japanese market, the increase in sales was primarily due to the uptake of Tarceva for second-line NSCLC and oncologists' increasing confidence in the benefits of treatment with the medication. Pricing pressure and competitive challenges negatively affected sales in Western Europe, offsetting the positive impact of volume gains from initial launches in the new first-line, epidermal growth factor receptor (EGFR) mutation-positive, metastatic NSCLC indication.

CellCept

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	203	275	–13	21	21
Western Europe	284	451	–30	29	35
Japan	64	61	+11	6	5
International	440	503	–4	44	39
Total sales	**991**	**1,290**	**–14**	**100**	**100**

CellCept: for the prevention of solid organ transplant rejection. Sales again declined sharply in 2011 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. Continued growth in Japan reflects the position of CellCept as the standard of care in its approved indications.

NeoRecormon/Epogin

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	–	–	–	–	–
Western Europe	310	474	–27	34	37
Japan	320	476	–28	36	37
International	266	335	–12	30	26
Total sales	**896**	**1,285**	**–23**	**100**	**100**

NeoRecormon/Epogin: for anemia/renal anemia. In a highly competitive market the Group's overall market share in the anemia franchise was only slightly down for the year. Combined sales of Roche's NeoRecormon and Chugai's Epogin (epoetin beta) declined 23% in constant currencies. 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 strong growth in sales of the longer-acting erythropoiesis-stimulating agent Mircera (methoxy polyethylene glycol-epoetin beta), which rose 50% at constant exchange rates to 344 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 by Chugai in July 2011, and from the International region, which now accounts for about 30% of total Mircera sales.

Bonviva/Boniva

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	313	526	–30	45	52
Western Europe	213	293	–19	31	29
Japan	–	–	–	–	–
International	170	194	–2	24	19
Total sales	**696**	**1,013**	**–22**	**100**	**100**

Bonviva/Boniva: for osteoporosis. Sales in Western Europe were lower due to the entry of generics into the market together with pricing and reimbursement issues. The decrease in the US reflects falling market demand and reserve adjustments. There was strong growth in Asia–Pacific, 65% in constant currencies, which was led by South Korea. This was offset by lower sales in the rest of the International region, notably in some Eastern European countries and Brazil.

Actemra/RoActemra

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	141	58	+188	23	15
Western Europe	198	136	+62	32	34
Japan	195	167	+24	31	42
International	84	36	+158	14	9
Total sales	**618**	**397**	**+73**	**100**	**100**

Actemra/RoActemra: for rheumatoid arthritis (RA) and systemic juvenile idiopathic arthritis. Sales continued to grow strongly in all approved indications and all regions. Sales increased particularly in the US, where Actemra continues to gain market share, and also in Western Europe, Japan and Latin America. Marketing and reimbursement approvals in additional countries continue to expand patient access to Actemra/RoActemra. Sustained growth in the US and elsewhere was due to the uptake in later lines of therapy, depending on the approved indication. Sales in Japan grew strongly due to the increasing use of Actemra in first-line and later lines of therapy, supported by recognition of the high remission rates achieved with the medicine in RA.

Tamiflu

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	160	243	–23	44	28
Western Europe	53	2	over +1,000	15	0
Japan	97	216	–52	27	25
International	49	412	–87	14	47
Total sales	**359**	**873**	**–53**	**100**	**100**

Tamiflu: for influenza A and B. Following unprecedented demand in 2009 due to the influenza A (H1N1) pandemic, sales continued to decline strongly in 2011 reflecting not only a baseline effect from 2010 but also moderate influenza seasons in both hemispheres. In 2010 there were significantly higher sales to governments, particularly in Japan and in the International region, notably in Brazil, South Korea, Taiwan and Mexico. The limited sales to governments in 2011 were primarily driven by the replacement of expiring pandemic stockpiles.

Zelboraf

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	30	–	–	97	–
Western Europe	1	–	–	3	–
Japan	–	–	–	–	–
International	–	–	–	–	–
Total sales	**31**	**–**	**–**	**100**	**–**

Zelboraf: for BRAF V600-mutated metastatic melanoma. The US Food and Drug Administration approved Zelboraf in August 2011, enabling Genentech to launch this new targeted cancer medicine in the United States less than four months after the marketing application was filed. 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. Initial sales of Zelboraf have been strong and broad payer coverage has already been achieved. Marketing approval was also obtained in Switzerland and Brazil in the fourth quarter of 2011. In December 2011 the European Medicines Agency's Committee for Medicinal Products for Human Use (CHMP) unanimously recommended that Zelboraf be granted full EU marketing approval. Marketing applications have been filed in a number of other countries, including Australia and New Zealand, where rates of malignant melanoma are high.

Pharmaceuticals Division – Sales by region

Region	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
United States	12,223	14,071	+2	37	38
Western Europe	8,221	9,467	–3	25	25
Japan	3,817	4,319	–6	12	12
International	8,533	9,201	+3	26	25
– CEMAI [1]	*2,994*	*3,336*	*–2*	*9*	*9*
– Latin America	*2,408*	*2,694*	*+3*	*7*	*7*
– Asia–Pacific	*2,168*	*2,166*	*+10*	*7*	*6*
– Other regions	*963*	*1,005*	*+5*	*3*	*3*
Total sales	**32,794**	**37,058**	**0**	**100**	**100**

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

United States. Sales grew by 2% in US dollar terms with growth driven by Lucentis, MabThera/Rituxan, Actemra and Herceptin, more than offsetting the decline in US Avastin sales. In addition the impact of the US healthcare reforms led to a reduction of sales of approximately 355 million US dollars (315 million Swiss francs) in 2011 through increased rebates, affecting all major products, compared to 247 million US dollars (258 million Swiss francs) in 2010.

Western Europe. Sales decreased by 3% in constant currencies despite the growth in the oncology products MabThera/Rituxan and Herceptin and further uptake of Actemra/RoActemra. The decline was due to lower Avastin sales, the continuing impact of generic erosion on CellCept and Bonviva/Boniva sales and lower sales of NeoRecormon in the highly competitive renal anemia market. In addition there was an estimated 400 million euros (494 million Swiss francs) negative impact from European austerity measures, compared to 225 million euros (311 million Swiss francs) in 2010.

Japan. A decrease of 6% in sales in Japanese yen terms was due primarily to the direct and indirect effects of the earthquake in March and a further decline in government purchases of Tamiflu. Emergency relief efforts and the rapid implementation by Chugai of a recovery programme to ensure product supplies and restore production took priority over marketing activities until normal operations were resumed towards the end of 2011. To ensure uninterrupted supplies of medicines to patients, shipment controls were introduced for a number of key products immediately following the earthquake. In some cases these controls were maintained until well into the fourth quarter, with promotional activities reduced accordingly. In addition, in the first half of 2011 there was still a residual effect from the mandatory two-yearly pharmaceutical price cuts implemented in April 2010. Growth in Avastin (7%), the launch of Mircera and higher Actemra sales (24%) were more than offset by lower sales of Epogin (–28%), Pegasys (–21%) and Kytril (–38%).

International. Asia–Pacific showed particularly strong growth, led by the oncology franchise, with the top selling products being Herceptin (36%), MabThera/Rituxan (15%) and Avastin (34%). China was the main driver, with overall sales growth of 35%. Growth in Latin America was also mainly due to the oncology products, especially Herceptin (28%), MabThera/Rituxan (21%) and Avastin (18%). In Mexico there was a negative impact from biosimilar competition. Actemra/RoActemra sales also continued to grow in Latin America, increasing by 130%. The underlying sales growth in Brazil and South Korea was more than offset by the significantly lower Tamiflu sales (excluding Tamiflu, growth was 12% and 17%, respectively). Excluding Tamiflu, total sales in the E7 key emerging markets grew by 13%. Sales excluding Tamiflu in the CEMAI sub-region declined due to political developments in North Africa and Middle East, as well as some price pressure in Eastern European markets.

Pharmaceuticals Division – Sales for E7 leading emerging markets

Country	2011 (mCHF)	2010 (mCHF)	% change (CER) total	% change (CER) excluding Tamiflu	% of sales (2011)	% of sales (2010)
Brazil	940	1,142	–8	+12	3	3
China	891	750	+35	+34	3	2
India	83	91	–9	–9	0	0
Mexico	427	540	–9	–2	1	1
Russia	387	387	+2	+3	1	1
South Korea	176	228	–13	+17	1	1
Turkey	267	341	+2	+2	1	1
Total sales	**3,171**	**3,479**	**+3**	**+13**	**10**	**9**

Operating results

Pharmaceuticals Division – Royalties and other operating income

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Royalty income	1,206	1,344	+4
Income from out-licensing agreements	115	73	+78
Income from disposal of products and other	132	120	+23
Total – IFRS and Core basis	**1,453**	**1,537**	**+9**

Royalty income increased at constant exchange rates mainly as a result of higher Lucentis royalties. The increase in constant currencies for out-licensing agreements was driven by milestone income for Marcadia compounds and Lucentis. There was also higher income from profit sharing agreements, while income from disposal of products was relatively stable.

Pharmaceuticals Division – Cost of sales

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(4,340)	(4,579)	+3
Royalty expenses	(1,339)	(1,738)	–14
Collaboration and profit-sharing agreements	(1,375)	(1,628)	–2
Restructuring expenses	–	2	–100
Impairment of property, plant and equipment	1	(4)	–
Cost of sales – Core basis	**(7,053)**	**(7,947)**	**–2**
Global restructuring – Operational Excellence	(167)	(66)	+177
Amortisation of intangible assets	(137)	(156)	–2
Impairment of intangible assets	(32)	–	–
East Japan Earthquake	(47)	–	–
Total – IFRS basis	**(7,436)**	**(8,169)**	**+1**

Cost of sales on a core basis decreased by 2% in constant currencies mainly as a result of lower royalty expenses. As a percentage of sales, cost of sales increased slightly to 21.5% (2010: 21.4%). The increase in manufacturing cost of goods sold and period costs was mainly due to product mix effects, start-up activities for product launches and some inventory write-offs in the second half of 2011. Royalty expenses were 14% lower mainly arising from expiring royalty obligations for Herceptin in major EU countries beginning late in 2010, as well as lower sales of Tamiflu and contractual changes on US sales of Bonviva/Boniva. These were partly offset by back royalty expenses of 99 million Swiss francs related to the Rituxan arbitration (see Note 24 of the Consolidated Financial Statements). Expenses for collaboration and profit-sharing agreements decreased, in part due to the estimated 38 million Swiss francs that would be recoverable in respect of the Rituxan arbitration mentioned above. Site closure and disposal costs in the manufacturing and logistics area of 167 million Swiss francs were recorded as part of the Operational Excellence programme. In addition, due to the East Japan Earthquake, 47 million Swiss francs costs were reported for impairments, repairs and maintenance of plants and write-offs of raw materials and intermediates at Chugai.

Pharmaceuticals Division – Marketing and distribution

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(5,564)**	**(6,652)**	**–6**
Global restructuring – Operational Excellence	(65)	(312)	–76
East Japan Earthquake	(7)	–	–
Total – IFRS basis	**(5,636)**	**(6,964)**	**–9**

Core costs decreased by 6% due to tight cost management and savings from the Operational Excellence programme. As a percentage of sales, costs decreased by 1.1 percentage points to 16.9% (2010: 18.0%). Sales and marketing efforts focused on the oncology portfolio with the rollout of additional approved indications of Avastin, MabThera/Rituxan and Herceptin, and continued rollouts of Actemra/RoActemra in rheumatoid arthritis. Costs were also incurred for the continued support of Pegasys, Xeloda and Tarceva. Further significant bad debt provision expenses totalling 121 million Swiss francs were incurred in 2011, in particular for Southern European countries. Non-core costs of 65 million Swiss francs were recorded as part of the Operational Excellence programme related to employee termination costs.

Pharmaceuticals Division – Research and development

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Research and development – Core basis	**(7,173)**	**(8,160)**	**–2**
Global restructuring – Operational Excellence	(162)	(277)	–33
Amortisation of intangible assets	(15)	(19)	–14
Impairment of intangible assets	(47)	(634)	–92
Total – IFRS basis	**(7,397)**	**(9,090)**	**–10**

Core costs were lower by 2% due to resource prioritisation and savings from the Operational Excellence programme. Research and development costs as a percentage of sales were 21.9% compared to 22.0% in 2010. Oncology remained the main focus area, and there were higher investments in Central Nervous System and Virology, which were offset by lower lifecycle investments in Metabolism and Inflammation. Operational Excellence costs of 162 million Swiss francs relate primarily to site disposals and property, plant and equipment impairments. The 2011 impairment charge for intangible assets relates to some assets acquired from alliance transactions or acquisitions. The majority of the large impairment in 2010 arose from project terminations from the Operational Excellence programme. In addition, the Pharmaceuticals Division spent 236 million Swiss francs on in-licensed and acquired pipeline compounds and technologies, which were capitalised as intangible assets.

Pharmaceuticals Division – General and administration

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Administration	(967)	(1,110)	–4
Restructuring expenses	(3)	21	–
Gains (losses) on disposal of property, plant and equipment	–	9	–100
Business taxes	(199)	(55)	+320
Other general items	118	75	+180
General and administration – Core basis	**(1,051)**	**(1,060)**	**+10**
Global restructuring – Operational Excellence	(456)	(113)	+357
Global restructuring – Genentech transaction	–	(596)	–100
Alliances and business combinations	39	(1)	–
Legal and environmental settlements	(56)	(301)	–79
East Japan Earthquake	(3)	–	–
Total – IFRS basis	**(1,527)**	**(2,071)**	**–18**

Core costs increased by 10%, mainly due to the new Branded Pharmaceutical Product Fee in the US, which had a cost impact of 149 million Swiss francs. Excluding this fee, constant currency core costs decreased by 6%. This was driven by lower administration costs due to savings and the further organisational shift of certain Finance functions to Corporate. The non-core costs in the general and administration area included costs of 456 million Swiss francs relating to Operational Excellence, which consists mainly of site disposal costs for the US sites at Boulder, Colorado and Madison, Wisconsin and the site at Kulmbach in Germany. These costs were partly offset by a gain on disposal of the site at Palo Alto in California. Additionally there were various IT-related expenses for Operational Excellence. Alliances and business combinations include 43 million Swiss francs related to the reversal of provisions for contingent consideration arrangements for business combinations.

Financial position

Pharmaceuticals Division – Net operating assets

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	7,861	7,966	–1	–1	(68)	(37)
Inventories	3,177	3,322	–4	–2	(97)	(48)
Payables	(5,593)	(5,522)	+1	+1	(66)	(5)
Net working capital	**5,445**	**5,766**	**–6**	**–3**	**(231)**	**(90)**
Property, plant and equipment	11,586	12,224	–5	–6	(668)	30
Goodwill and intangible assets	4,851	4,635	+5	+4	171	45
Provisions	(2,124)	(2,489)	–15	–14	350	15
Other long-term assets, net	250	225	+11	+11	21	4
Long-term net operating assets	**14,563**	**14,595**	**0**	**–1**	**(126)**	**94**
Net operating assets	**20,008**	**20,361**	**–2**	**–2**	**(357)**	**4**

The absolute amount of the movement between the 2011 and 2010 consolidated balances reported in Swiss francs is split between actual 2011 transactions (translated at average rates for 2010) and the currency translation adjustment (CTA) that arises on consolidation. The 2011 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 45 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. During the first half of 2011 the Swiss franc strengthened against many currencies. Following the intervention of the Swiss Central Bank this trend reversed in the second half of 2011. As a result at the end of 2011, the US dollar is at the same exchange rate as at the start of the year and the euro is only slightly weaker against the Swiss franc. The Japanese yen strengthened against the Swiss franc year-on-year, while the Swiss franc strengthened against some other currencies such as the Brazilian real and the Turkish lira. Overall these effects almost completely netted out on total net operating assets in the Pharmaceuticals Division when consolidated into Swiss francs.

Net working capital. The decrease of 3% in constant currencies was mainly due to decreases in inventories and other receivables and prepaid expenses. The balance sheet value of inventories decreased mainly due to inventory write-offs made in the second half of 2011. There was a certain build-up in key growth markets such as China and the Asia–Pacific and Latin America regions. Trade receivables increased by 1%, with the main factors being increases in public sector receivables in some Southern European countries, particularly in Spain and Portugal, and also the continued growth of the business in China. These increases more than offset the decrease of 344 million Swiss francs following the settlement of public sector trade receivables with government bonds in Greece. Payables increased slightly with accrued royalty liabilities increasing.

Long-term net operating assets. Property, plant and equipment decreased mainly due to the various site divestments from the Operational Excellence programme. At the same time there were additions from the completion of new manufacturing facilities and the expansion of technical research and development facilities in Basel, Switzerland, and Penzberg, Germany. Goodwill and intangibles increased mainly due to the acquisition of Anadys Pharmaceuticals. The decrease in provisions is mainly related to the settlement of obligations from the Operational Excellence programme.

Free cash flow

Pharmaceuticals Division – Operating free cash flow

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Operating profit	**12,251**	**12,301**	**+16**
– Depreciation, amortisation and impairment	1,520	2,069	–18
– Provisions	(352)	728	–
– Equity compensation plans	280	192	+69
– Other	838	307	+209
Operating profit cash adjustments [1]	**2,286**	**3,296**	**–22**
(Increase) decrease in net working capital			
– Receivables	(316)	(125)	+183
– Inventories	(87)	97	–
– Payables	4	(773)	–
– Other	(7)	(41)	–85
Total (increase) decrease in net working capital	**(406)**	**(842)**	**–43**
Investments in property, plant and equipment	(981)	(1,533)	–30
Investments in intangible assets	(236)	(289)	–6
Total investments	**(1,217)**	**(1,822)**	**–26**
Operating free cash flow	**12,914**	**12,933**	**+16**
– as % of sales	39.4	34.9	+5.6

1) A detailed breakdown is provided on page 150.

The Pharmaceuticals Division generated a strong operating free cash flow of 12.9 billion Swiss francs. The increase of 16% in constant currencies compared to 2010 was driven by the strong operating profit performance and lower capital expenditure which more than offset the increases in working capital. Trade receivables increased during 2011, partly as a result of continued sales growth in China. Another factor is the significant increase in trade receivables within the public sector customers of Southern European countries, particularly Spain and Portugal. Measures are being taken to improve collections in these countries, including intense communication with customers, negotiations of payment plans, charging of interest for late payments, and legal action. From a cash flow perspective, cash invested in inventories increased due to the growth in key growth markets, such as Asia–Pacific, Latin America, and especially China. Payables increased due to increases in accrued royalty liabilities. Operating profit cash adjustments decreased mainly due to the significant cash outflows for the utilisation of Operational Excellence programme provisions and lower depreciation, amortisation and impairments. These were partially offset by the cash received from disposals.

Diagnostics Division operating results

Diagnostics Division operating results

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	9,737	10,415	–7	+6
Royalties and other operating income	129	157	–18	–7
Cost of sales	(4,506)	(5,124)	–12	–1
Marketing and distribution	(2,413)	(2,524)	–4	+8
Research and development	(929)	(936)	–1	+10
General and administration	(362)	(409)	–11	–2
Operating profit	**1,656**	**1,579**	**+5**	**+22**
– margin, % of sales	17.0	15.2	+1.8	+2.3
Core results [1]				
Sales	9,737	10,415	–7	+6
Royalties and other operating income	129	157	–18	–7
Cost of sales	(4,064)	(4,564)	–11	+1
Marketing and distribution	(2,403)	(2,515)	–4	+8
Research and development	(900)	(890)	+1	+12
General and administration	(321)	(401)	–20	–12
Core operating profit	**2,178**	**2,202**	**–1**	**+14**
– margin, % of sales	22.4	21.1	+1.3	+1.6
Financial position				
Net working capital	3,501	3,025	+16	+20
Long-term net operating assets	12,022	12,025	0	+1
Net operating assets	**15,523**	**15,050**	**+3**	**+5**
Free cash flow				
Operating free cash flow	1,259	1,634	–23	–7
– margin, % of sales	12.9	15.7	–2.8	–1.9

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

Sales

The Diagnostics business continued to increase sales significantly above the *in vitro* diagnostics (IVD) global market with a growth of 6% in constant currencies over 2010. Professional Diagnostics with 9% sales growth, leveraged by Immunodiagnostics, and Tissue Diagnostics with 15% sales growth, driven by sales in the advanced staining market, were the main growth contributors. Both business areas were growing at around twice the rate of their respective markets. Diabetes Care sales increased to 2,675 million Swiss francs, an increase of 2% in constant currencies. Sales in Molecular Diagnostics totalled 1,094 million Swiss francs, an increase of 4%, driven by the virology segment. Applied Science sales decreased by 3%, due to the year-on-year decline in H1N1 influenza virus testing, increasing competition in sequencing, and a slowdown in research funding.

Diagnostics Division – Sales by business area

Business area	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Professional Diagnostics	4,686	4,858	+9	48	47
Diabetes Care	2,675	2,959	+2	27	28
Molecular Diagnostics	1,094	1,189	+4	11	12
Applied Science	740	868	–3	8	8
Tissue Diagnostics	542	541	+15	6	5
Total sales	**9,737**	**10,415**	**+6**	**100**	**100**

Professional Diagnostics

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	2,369	2,545	+5	50	52
North America	836	907	+8	18	19
Rest of the World	1,481	1,406	+18	32	29
Total sales	**4,686**	**4,858**	**+9**	**100**	**100**

Professional Diagnostics. Sales grew at almost double the rate of the global market, with especially strong growth in emerging markets. In early 2011 Roche Professional Diagnostics took the leading position in its market which includes IVD products for clinical laboratories and hospital/ambulatory point-of-care testing. The key drivers for this growth were the growth of 13% in the immunoassays business, where Roche has the broadest menu offering in the industry with 95 tests, and growth of 7% in the clinical chemistry business. Instrument placements as a whole were again up despite temporary disruptions in the supply of instruments by our manufacturing partner Hitachi High Technologies, due to the East Japan Earthquake. There was further growth in coagulation monitoring business of 9% from the ongoing conversion of patients to self-testing. This led to a further increase of Professional Diagnostics' leading market share in this sector, despite the introduction of new anti-coagulant therapies in the market.

In the EMEA (Europe, Middle East and Africa) and North America regions the business maintained growth above market levels, with particularly increased market penetration in North America. In the International region there was continued above-market growth, led by Asia–Pacific (21%) and Latin America (15%). There were further investments in China, and this contributed to a 27% growth in 2011, which strengthened Roche Professional Diagnostics' market leadership position in this country.

During the year the business launched seven new immunoassays and the cobas c702 clinical chemistry module. Amongst these new immunoassays are the HBsAg quant assay that determines hepatitis B viral load for Pegasys therapy, the HE4 immunoassay that helps to detect early ovarian cancer, and Vitamin D Total for the measurement of vitamins D_2 and D_3. During 2011, the business completed the acquisition of PVT, a leader in laboratory automation and workflow, and in early 2012 acquired Verum Diagnostica, a leading company in platelet function testing.

Diabetes Care

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	1,585	1,743	+2	59	59
North America	594	721	–4	22	24
Rest of the World	496	495	+12	19	17
Total sales	**2,675**	**2,959**	**+2**	**100**	**100**

Diabetes Care. Sales increased slightly in an environment impacted by price pressure, slow volume growth and increasing regulatory requirements, particularly in the US. Growth in the Rest of the World regions was partly offset by reduced sales in North America. Despite the challenging market, Diabetes Care remains the leader in global blood glucose (bG) monitoring, holding close to one third of the global market. The main growth drivers were the new generation of Accu-Chek bG monitoring systems and the Accu-Chek Combo, a combined insulin pump and bG meter. Good sales development of these products in EMEA and the Rest of the World regions helped to strengthen Roche Diabetes Care's market position, with especially strong growth in Asia–Pacific (13%) and Latin America (13%). In the US the decline in sales was mainly due to the postponed launch of the latest additions to the new Accu-Chek portfolio.

The FDA's clearance of the new maltose-independent chemistry for the Accu-Chek Aviva Plus test strip in the third quarter marked the first step in bringing the new portfolio to the US. This is expected to drive future growth in this key market. In late 2011, Roche Diabetes Care started launching the next generation of its strip-free bG meter Accu-Chek Mobile in Australia and the Netherlands. In the insulin delivery segment, insulin pumps sales grew driven mainly by the increased number of patients on Accu-Chek Combo, whereas sales of infusion sets were negatively impacted by the voluntary recall of the Accu-Chek FlexLink Plus.

Molecular Diagnostics

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	438	494	0	40	42
North America	368	398	+8	34	33
Rest of the World	288	297	+7	26	25
Total sales	**1,094**	**1,189**	**+4**	**100**	**100**

Molecular Diagnostics. The growth in sales was due to the strong performance in the North America and the Rest of the World regions, notably in the United States and China. Roche Molecular Diagnostics retains its leadership position in the global molecular diagnostics market, with close to one third of the global market. With a large and expanding test menu, the business' main sales growth came from the HIV and HBV viral load tests and the blood screening business, which grew by 5%. In the EMEA region, in spite of the pricing pressures on the virology and blood screening segments, the overall business remained stable with a majority share of the market.

With the FDA's approval of the human papillomavirus (HPV) test in April 2011, the business entered into the largest single and fastest growing molecular testing market. The HPV test experienced positive uptake in the EU, where it had been previously launched, and won the tender from Karolinska University Hospital in Sweden for the first large pilot project in the EU for HPV primary screening. In the US partnerships and contracts were signed with major laboratories and the physician sales force started to expand HPV business.

The business area continued to build its novel oncology portfolio, with the launch of tests for detecting cancer-related mutations of the BRAF (melanoma), EGFR (lung cancer) and KRAS (colorectal cancer) genes complementing Roche's portfolio of companion diagnostics. The cobas BRAF test has seen a strong market uptake, and is now available in Europe, the Americas and Asia–Pacific. Further developments in personalised healthcare came from the partnerships with large pharmaceutical companies, including Merck and Clovis, as well as continued internal Roche projects on future assays for the detection of biomarkers.

Applied Science

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	299	350	–4	40	40
North America	271	327	–3	37	38
Rest of the World	170	191	–2	23	22
Total sales	**740**	**868**	**–3**	**100**	**100**

Applied Science. The sales decline was driven by the EMEA and North America regions and also Japan, and was due to the slowdown in research funding, increasing competition in gene sequencing and the year-on-year effect from large orders for H1N1 influenza testing in early 2010. This effect was especially marked in the Asia–Pacific region, where there was a sales decline of 3%. Excluding this effect, sales in Asia–Pacific increased by 7%.

The Custom Biotech and Biochemicals business, which accounts for approximately 43% of Applied Science's revenues, continued its healthy growth with an increase in sales of 5%. This business supplies various products to the healthcare industry including specialty biochemicals and a new bioprocess analyser. Instrument placements declined in the Genomics and PCR analysis businesses, leading to a 15% and 2% reduction in sales, respectively. Despite this some products continued to gain market share and generate growth. These include the test kits for the GS Junior benchtop system for gene sequencing, test kits for the MagNA Pure 96 for DNA sample preparation and the SeqCap microarrays for targeted sequencing. A major launch during the year was LightCycler Nano, a small and affordable instrument for automised PCR analysis.

Tissue Diagnostics

	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	130	120	+21	24	22
North America	355	373	+12	65	69
Rest of the World	57	48	+30	11	9
Total sales	**542**	**541**	**+15**	**100**	**100**

Tissue Diagnostics. Sales grew substantially ahead of the market in all regions, reinforcing the business' leadership position in tissue-based cancer diagnostics. In EMEA and Japan sales grew at more than double the market rate, reflecting intensified uptake of Roche Tissue Diagnostics' automated solutions and novel advanced staining tests in these regions.

Growth was driven by increasing instrument placements, as well as increasing sales in immunohistochemistry (IHC) and *in situ* hybridisation (ISH) assays that are used to detect proteins and genes in tissue samples. Including 29 new antibodies for IHC testing, the business' industry-leading test menu now includes more than 220 ready-to-use antibody tests.

The newly launched OptiView system improves sensitivity and visualisation in IHC assays, enabling pathologists to improve the detection of biomarkers in tissue samples. In June 2011, Roche Tissue Diagnostics launched its HER2 Dual ISH test in the US supporting personalised breast cancer treatment. The test has seen a rapid uptake worldwide and is achieving a leadership position in the EU and other markets. Combined with the HER2 (4B5) IHC test and the Companion Algorithm HER2 (4B5) analytical imaging software, the business now offers the only complete HER2 diagnostic workflow for laboratories. During 2011 the business completed the acquisition of mtm laboratories, a leader in cervical cancer *in vitro* diagnostics.

Diagnostics Division – Sales by region

Region	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Europe, Middle East and Africa (EMEA)	4,821	5,252	+3	50	50
North America	2,424	2,726	+4	25	26
Asia–Pacific	1,281	1,220	+17	13	12
Latin America	686	687	+15	7	7
Japan	525	530	+6	5	5
Total sales	**9,737**	**10,415**	**+6**	**100**	**100**

Sales continued to grow in all regions. The Asia-Pacific region achieved strong growth of 17%, led by China growing 27% and South Korea growing 16%. This growth was driven mainly by Professional Diagnostics but partly offset by lower Applied Science sales due to the non-recurrence of orders in the first half of 2010 related to H1N1 influenza tests. Despite pricing challenges in EMEA (Europe, Middle East and Africa) and North America, sales in these regions grew by 3% and 4%, respectively, driven by Professional Diagnostics. In North America, the division's market share continued to grow in the *in vitro* diagnostics business with the strong sales in this area more than offsetting the decline in Diabetes Care sales following from postponed launches in the US. In Japan the good performances of Professional Diagnostics and Tissue Diagnostics were partly offset by lower sales in Applied Science resulting in a total sales growth of 6%.

Diagnostics Division – Sales for E7 leading emerging markets

Country	2011 (mCHF)	2010 (mCHF)	% change (CER)	% of sales (2011)	% of sales (2010)
Brazil	260	269	+8	3	3
China	481	426	+27	5	4
India	86	90	+14	1	1
Mexico	101	99	+18	1	1
Russia	184	152	+37	2	1
South Korea	135	131	+16	1	1
Turkey	120	154	+2	1	2
Total sales	**1,367**	**1,321**	**+19**	**14**	**13**

The sales growth in the E7 emerging markets was led by China, with contributions from Russia and South Korea. The strong growth in China was driven by the demographic change and the healthcare reform which foresees an investment of 120 billion US dollars in primary healthcare over the next three years and provides a national insurance plan for more than 90% of the population. Growth in China was particularly strong in the Professional Diagnostics and Molecular Diagnostics businesses. The significant growth in Russia was achieved by winning some major tenders, mainly for Professional Diagnostics and Molecular Diagnostics, related to the Russian Healthcare Modernisation Programme.

Operating results

Diagnostics Division – Royalties and other operating income

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Royalty income	96	128	–15
Income from out-licensing agreements	22	18	+32
Income from disposal of products and other	11	11	+22
Total – IFRS and Core basis	**129**	**157**	**–7**

The decrease in royalty and other operating income is due to a fall in royalty income of as a result of patent expiration of the US TaqMan PCR patents in Molecular Diagnostics and higher royalty expense on royalty income due to payments to patent owners in Molecular Diagnostics (Idaho PCR contracts) and in Professional Diagnostics (HCV Bioprocess patents).

Diagnostics Division – Cost of sales

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(3,924)	(4,271)	+4
Royalty expenses	(138)	(292)	–47
Collaboration and profit-sharing agreements	(1)	–	–
Impairment of property, plant and equipment	(1)	(1)	+47
Cost of sales – Core basis	**(4,064)**	**(4,564)**	**+1**
Global restructuring – Operational Excellence	(27)	(91)	–67
Amortisation of product intangibles	(361)	(436)	–7
Impairment of product intangibles	(54)	(33)	+80
Total – IFRS basis	**(4,506)**	**(5,124)**	**–1**

The growth of core costs was lower than the sales growth resulting in a lower cost-of-sales ratio of 41.7%. Previous cost reduction initiatives, such as the centralisation of logistics services, harmonisation of technical services practices and renegotiations of supplier contracts, continued to have a positive impact. These partly compensated for the higher depreciation, installation costs and technical service costs from the continued investments to expand market share through meter placements and further increase in the installed instrument base. The decrease in royalty expenses to 138 million Swiss francs was due to patent expirations for certain in-licensed intellectual property. As part of the Operational Excellence programme costs of 27 million Swiss francs were incurred mainly relating to the employee-related costs at Graz in Austria, and Rotkreuz and Burgdorf in Switzerland. The decrease in amortisation of 7% in constant currencies is mainly due to certain assets becoming fully amortised which was partly offset with the amortisation of the recently acquired intangible assets of Medingo and mtm laboratories. In the second half of 2011 there was an impairment of 54 million Swiss francs booked for intangibles in the sequencing and array businesses.

Diagnostics Division – Marketing and distribution

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(2,403)**	**(2,515)**	**+8**
Global restructuring – Operational Excellence	(5)	(5)	+5
Amortisation of intangible assets	(5)	(4)	+33
Total – IFRS basis	**(2,413)**	**(2,524)**	**+8**

Marketing and distribution costs increased reflecting higher costs in Molecular Diagnostics, notably in the microbiology area and for the launch of the cobas HPV DNA test. In Professional Diagnostics the immunoassay and clinical chemistry segments remain the highest contributors, in particular due to increased distribution costs following the East Japan Earthquake that led to a change from shipping to air freight. The increase in 2011 also comes from higher marketing support for the advanced staining assay portfolio in Tissue Diagnostics, and the work flow automation and coagulation monitoring sectors in Professional Diagnostics. On a core basis, marketing and distribution costs as a percentage of sales were 24.7% compared to 24.1% in 2010.

Diagnostics Division – Research and development

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Research and development – Core basis	**(900)**	**(890)**	**+12**
Global restructuring – Operational Excellence	(22)	(42)	–43
Amortisation of intangible assets	(2)	(4)	–41
Impairment of intangible assets	(5)	–	–
Total – IFRS basis	**(929)**	**(936)**	**+10**

Research and development core costs increased driven by the development of the NewGen instrument and new personalised healthcare oncology tests in Molecular Diagnostics, the micropump in Diabetes Care, digital pathology products in Tissue Diagnostics and investments in new immunoassays and the laboratory coagulation portfolio in Professional Diagnostics. As a percentage of sales, core research and development costs increased to 9.2% from 8.6%. Operational Excellence expenses of 22 million Swiss francs are mainly due to employee-related costs at Graz in Austria.

Diagnostics Division – General and administration

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Administration	(327)	(364)	–1
Restructuring expenses	3	10	–69
Gains (losses) on disposal of property, plant and equipment	–	–	–
Other general items	3	(47)	–
General and administration – Core basis	**(321)**	**(401)**	**–12**
Global restructuring – Operational Excellence	(18)	(6)	+211
Alliances and business combinations	3	(4)	–
Legal and environmental settlements	(26)	2	–
Total – IFRS basis	**(362)**	**(409)**	**–2**

General and administration costs decreased mainly due to the costs of the transfer of the logistics centre within Brazil. Operational Excellence costs were 18 million Swiss francs, consisting mainly of reorganisation expenses.

Financial position

Diagnostics Division – Net operating assets

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	3,593	3,159	+14	+17	523	(89)
Inventories	1,883	1,650	+14	+16	268	(35)
Payables	(1,975)	(1,784)	+11	+12	(205)	14
Net working capital	**3,501**	**3,025**	**+16**	**+20**	**586**	**(110)**
Property, plant and equipment	4,484	4,368	+3	+4	184	(68)
Goodwill and intangible assets	8,118	8,220	–1	–1	(60)	(42)
Provisions	(481)	(459)	+5	+7	(28)	6
Other long-term assets, net	(99)	(104)	–6	–4	3	2
Long-term net operating assets	**12,022**	**12,025**	**0**	**+1**	**99**	**(102)**
Net operating assets	**15,523**	**15,050**	**+3**	**+5**	**685**	**(212)**

The absolute amount of the movement between the 2011 and 2010 consolidated balances reported in Swiss francs is split between actual 2011 transactions (translated at average rates for 2010) and the currency translation adjustment (CTA) that arises on consolidation. The 2011 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 45 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. During the first half of 2011 the Swiss franc strengthened against many currencies. Following the intervention of the Swiss Central Bank, this trend reversed in the second half of 2011. As a result at the end of 2011, the US dollar is at the same exchange rate as at the start of the year and the euro is only slightly weaker against the Swiss franc. The Japanese yen strengthened against the Swiss franc year-on-year, while the Swiss franc strengthened against some other currencies such as the Brazilian real and the Turkish lira. Overall these effects largely netted out on total net operating assets in the Diagnostics Division when consolidated into Swiss francs.

Net working capital. The 20% increase in constant currencies was driven by increases in receivables and inventories. The main factors behind these increases were build-ups in trade receivable in certain Southern European countries and increased inventory levels due to product launches like the cobas 8000, inventory increases related to acquisitions and to the build-up of Hitachi-sourced analysers after earthquake in Japan. Receivables decreased by 64 million Swiss francs following the settlement of public sector trade receivables with government bonds in Greece. Payables were also higher due to accelerated efforts to increase and harmonise supplier payment terms.

Long-term net operating assets. The total balance in constant currencies increased by 1%. The investments in property, plant and equipment, notably for instrument placements with customers, were partially offset by decreases in intangible assets and by increased provisions, mainly for Operational Excellence employee-related costs.

Free cash flow

Diagnostics Division – Operating free cash flow

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Operating profit	**1,656**	**1,579**	**+22**
– Depreciation, amortisation and impairment	1,193	1,281	+5
– Provisions	(55)	167	–
– Equity compensation plans	25	28	–2
– Other	192	153	+49
Operating profit cash adjustments [1]	**1,355**	**1,629**	**–5**
(Increase) decrease in net working capital			
– Receivables	(635)	(334)	+116
– Inventories	(333)	(202)	+68
– Payables	207	138	+71
– Other	(4)	(7)	–40
Total (increase) decrease in net working capital	**(765)**	**(405)**	**+105**
Investments in property, plant and equipment	(977)	(1,119)	–1
Investments in intangible assets	(10)	(50)	–80
Total investments	**(987)**	**(1,169)**	**–5**
Operating free cash flow	**1,259**	**1,634**	**–7**
– as % of sales	12.9	15.7	

1) A detailed breakdown is provided on page 150.

The operating free cash flow of the Diagnostics Division decreased 7% in constant currencies and 23% upon translation into Swiss francs compared to 2010. The increase in the operating profit was more than offset by increases in net working capital, which arose from increases in trade receivables and overall higher inventory levels, partly offset by higher payables. The increases in trade receivables were due to longer settlement times, particularly in Southern Europe, and reduced factoring activities. The higher inventory levels resulted from the launch and growth of key products in Professional Diagnostics and Tissue Diagnostics and higher stock for products sourced from Japan. Payables were higher due to accelerated efforts to increase and harmonise supplier payment terms. Overall these had a negative effect on the operating free cash flow margin of 2.8 percentage points.

Corporate operating results

Corporate operating results summary

	2011 (mCHF)	2010 (mCHF)	% change (CER)
Administration	(402)	(365)	+12
Gains (losses) on divestment of subsidiaries	4	–	–
Restructuring expenses	–	1	–100
Other general items	(37)	(23)	+70
General and administration costs – Core basis [1]	**(435)**	**(387)**	**+15**
Global restructuring	(18)	(7)	+156
Legal and environmental settlements	–	–	–
Total costs – IFRS basis	**(453)**	**(394)**	**+17**
Financial position			
Net working capital	(42)	(45)	–9
Long-term net operating assets	2	3	+185
Net operating assets	**(40)**	**(42)**	**–6**
Free cash flow			
Operating free cash flow	(440)	(418)	+8

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

General and administration costs increased by 15% in constant currencies due to higher administration expenses of 12% in constant currencies as a result of the shift of certain Finance functions from the Pharmaceuticals Division to Corporate. Total costs on an IFRS basis grew at 17% in constant currencies to 453 million Swiss francs (2010: 394 million Swiss francs) at a higher rate than core costs, as the 2011 Operational Excellence restructuring expenses of 18 million Swiss francs were higher compared to last year's expenses.

Corporate operating free cash flow showed an increase in the net outflow driven by the higher allocated administration expenses due to continuous changes in the organisational structure in 2011.

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) 2011	% change (CER) 2010	% change (CHF) 2011	% change (CHF) 2010
Pharmaceuticals Division				
Sales	0	–2	–12	–5
Core operating profit	+5	+4	–9	0
Diagnostics Division				
Sales	+6	+8	–7	+4
Core operating profit	+14	+30	–1	+26
Group				
Sales	+1	0	–10	–3
Core operating profit	+6	+7	–9	+2

Exchange rates against the Swiss franc

	31 December 2011	Average 2011	31 December 2010	Average 2010
1 USD	0.94	0.89	0.94	1.04
1 EUR	1.22	1.23	1.24	1.38
100 JPY	1.21	1.11	1.15	1.19

In 2011 the average rates for the euro, the US dollar and all other major currencies were lower against the Swiss franc compared to 2010. For sales these developments resulted in a negative impact of 11 percentage points translating the growth of 1% in constant currencies in a decline of 10% in Swiss franc terms. In core operating profit the negative impact is even higher with 15 percentage points due to the different currency structure of operating costs and of sales. The 6% core operating profit growth in constant currencies translates into a decline of 9%. The currency translation exposure for the operating profit is mitigated by the Group having a majority of its cost base located outside Switzerland. The sensitivity of Group sales and core operating profit in absolute terms to a 1% movement in foreign currencies against the Swiss franc during 2011 are 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	147	48
Euro	103	52
Japanese yen	43	17
All other currencies	111	69

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

	2011 (mCHF)	2010 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Operating profit	13,454	13,486	0	+17
Associates	12	(3)	–	–
Financial income	647	557	+16	+28
Financing costs	(2,228)	(2,829)	–21	–10
Profit before taxes	**11,885**	**11,211**	**+6**	**+24**
Income taxes	(2,341)	(2,320)	+1	+18
Net income	**9,544**	**8,891**	**+7**	**+26**
Attributable to				
– Roche shareholders	9,343	8,666	+8	+26
– Non-controlling interests	201	225	–11	+2
Core results [1]				
Operating profit	15,149	16,591	–9	+6
Associates	12	(3)	–	–
Financial income	647	557	+16	+28
Financing costs	(2,228)	(2,829)	–21	–10
Profit before taxes	**13,580**	**14,316**	**–5**	**+10**
Income taxes	(2,895)	(3,135)	–8	+7
Net income	**10,685**	**11,181**	**–4**	**+11**
Attributable to				
– Roche shareholders	10,470	10,955	–4	+11
– Non-controlling interests	215	226	–5	+8
Financial position – Treasury and taxation				
Net debt	(15,566)	(19,157)	–19	–18
Pensions	(4,952)	(3,808)	+30	+30
Income taxes	174	(386)	–	–
Financial long-term assets	360	428	–16	–15
Derivatives, net	170	383	–56	–56
Collateral, net	(233)	(69)	+236	+236
Interest payable	(887)	(1,028)	–14	–14
Other non-operating assets, net	(75)	(70)	+6	+10
Total net assets (liabilities)	**(21,009)**	**(23,707)**	**–11**	**–11**
Free cash flow – Treasury and taxation				
Treasury activities	(1,493)	(1,396)	+7	+25
Taxes paid	(2,594)	(2,789)	–7	+5
Dividends paid	(5,742)	(5,265)	+9	+9
Total	**(9,829)**	**(9,450)**	**+4**	**+10**

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

Financial income

Financial income was 647 million Swiss francs, an increase of 28% at constant exchange rates (16% in Swiss francs). Interest income and income from debt securities were 71 million Swiss francs and remained at low levels due to the low prevailing interest rates. The net foreign exchange result was a gain of 20 million Swiss francs compared to a loss of 147 million Swiss francs in 2010. The improvement is due to the foreign exchange gains of 45 million Swiss francs in Venezuela following the enactment of a law allowing the Group to benefit from pre-devaluation treatment for certain transactions. This contrasts to 2010 where the Group incurred losses of 74 million Swiss francs caused by the currency devaluation in Venezuela. Net income from equity securities was 64 million Swiss francs, down by 30 million Swiss francs. Expected returns on pension plan assets were 500 million Swiss francs, down 3% at CER, mostly due to overall lower assumptions for expected returns. A full analysis of financial income is given in Note 4 to the Consolidated Financial Statements.

Financing costs

Financing costs were 2,228 million Swiss francs, a decrease of 601 million Swiss francs or 10% at constant exchange rates (21% in Swiss francs). The main driver was a decrease in interest expenses of 408 million Swiss francs, a decrease of 10% in constant currencies. This reflects both the continued repayment of the debt incurred to finance the Genentech transaction and a translation effect from the stronger Swiss franc. Financing costs also include 172 million Swiss francs for the early redemption of debt, compared to 255 million Swiss francs in 2010, as described in Note 26 to the Consolidated Financial Statements. The interest cost of pension plans was 565 million Swiss francs, a decrease of 5% at CER, mostly due to lower discount rates. 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 decreased by 0.6 percentage points to 21.3% in 2011 (2010: 21.9%). This decrease is due mainly to the relatively lower percentage profit contribution from higher tax jurisdictions, notably in Japan, and a decrease of the statutory tax rate in Basel, Switzerland. In addition to the drivers mentioned above, the IFRS effective tax rate decreased due to the increased tax benefits from equity compensation plans compared to 2010. 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

			2011			2010
	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	**13,580**	**(2,895)**	**21.3**	**14,316**	**(3,135)**	**21.9**
Global restructuring	(940)	268	28.5	(1,515)	398	26.3
Intangible assets	(658)	222	33.7	(1,286)	392	30.5
Other	(97)	64	66.0	(304)	25	8.2
Group's effective tax rate – IFRS basis	**11,885**	**(2,341)**	**19.7**	**11,211**	**(2,320)**	**20.7**

Financial position

The decrease in net debt is mainly due to the positive free cash flow generation, as is more fully described in the net debt section below. The increase in the net pension liability reflects falling interest rates leading to the discounted defined benefit obligation being higher, with further details given below in the pensions section. The net tax liability decreased mainly due to the deferred tax benefit from increased net pension liabilities recognised in equity as well as the fact that taxes paid exceeded the total income tax expense for 2011. The net derivative position decreased to 0.2 billion Swiss francs, mainly due to lower valuations on the cross-currency swaps following a stronger US dollar compared to euro. Interest payable relates mostly to bonds and notes with coupon payment dates in March 2012, and the decline is due to debt repayments in 2011. At 31 December 2011 the Group held financial long-term assets with a market value of 0.4 billion Swiss francs, down 15% compared to 2010. These 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 increased slightly to 1.5 billion Swiss francs mostly due to higher foreign exchange losses and lower gains from marketable securities partially offset by lower interest payments. Total taxes paid in 2011 were 2.6 billion Swiss francs, an increase of 5% at constant exchange rates. This was due to prepayments of tax and settlement of certain outstanding tax positions, partly offset by lower tax payments at Chugai. Total dividends paid in 2011 were 5.7 billion Swiss francs, an increase of 0.5 billion Swiss francs compared to 2010, reflecting the 10% increase of the Roche Group dividend.

Net debt

Net debt in millions of CHF

At 31 December 2010	
Cash and cash equivalents	1,841
Marketable securities	9,060
Long-term debt	(27,857)
Short-term debt	(2,201)
Net debt at beginning of period	**(19,157)**
Change in net debt during 2011	
Free cash flow for 2011	3,904
Transactions in own equity instruments	(535)
Business combinations, net of divestments of subsidiaries	(470)
Hedging and collateral arrangements	338
Currency translation, fair value and other movements	354
Change in net debt during period	**3,591**
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 end of period	**(15,566)**

Net debt – currency profile in millions of CHF

	Cash and marketable securities 2011	2010	Debt 2011	2010
US dollar [1]	1,102	1,933	(24,896)	(28,055)
Euro	2,133	2,530	(8)	(29)
Swiss franc	5,351	4,226	(1,484)	(1,484)
Japanese yen	2,080	1,618	–	–
Pound sterling	262	230	(287)	(471)
Other	359	364	(178)	(19)
Total	**11,287**	**10,901**	**(26,853)**	**(30,058)**

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 the end of 2011 was 15.6 billion Swiss francs, a decrease of 3.6 billion Swiss francs from 19.2 billion Swiss francs at the start of the year. This was mainly due to the free cash flow of 3.9 billion Swiss francs described above. An outflow of 0.5 billion Swiss francs came from transactions in own equity instruments which were executed to cover the exposure from equity compensation plans issued to employees. In addition 0.5 billion Swiss francs were paid in business combinations. During the year the Group received 0.3 billion Swiss francs from hedging and collateral agreements, which were set up following the financing of the Genentech transaction.

As previously described in the 2010 and 2009 annual financial statements, 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 (see Note 26). Collateral agreements were entered with the derivative counterparties to mitigate counterparty risk. During 2011 cash collateral of 0.1 billion Swiss francs was delivered to Roche. This increased the cash collateral balance in favour of Roche of 0.1 billion Swiss francs at the start of the year to 0.2 billion Swiss francs at 31 December 2011. 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 the Swiss franc and pound sterling. Currently the collateral balance moves by approximately 150 million US dollars if all of these foreign exchange rates move by 1% simultaneously. Collateral volatility will decrease to less than 100 million dollars for each 1% movement in foreign exchange rates by mid-2013 as the non-US dollar-denominated bonds and notes will be repaid. The realised gain on derivatives during 2011 was 0.2 billion Swiss francs and relates mainly to hedges on the non-US dollar-denominated bonds and notes.

The various debt repayments of 4.0 billion Swiss francs during 2011 largely absorbed the free cash flow of 3.9 billion Swiss francs. However, this had no significant 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 2011 expenses for the Group's defined contribution plans were 303 million Swiss francs (2010: 305 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

	2011 (mCHF)	2010 (mCHF)
Funded plans		
– Fair value of plan assets	10,622	10,667
– Defined benefit obligation	(12,428)	(11,464)
– Over (under) funding	**(1,806)**	**(797)**
Unfunded plans		
– Defined benefit obligation	(3,249)	(3,080)
Total funding status	**(5,055)**	**(3,877)**
Unrecognised past service costs	(24)	(31)
Limit on asset recognition	(10)	(4)
Reimbursement rights	137	104
Net recognised asset (liability)	**(4,952)**	**(3,808)**

Funding status. Overall the funding status of the Group's defined benefit plans decreased to 85% compared to 93% 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 2010. Plan assets were broadly stable, with company contributions increasing to 293 million Swiss francs in 2011, compared to 196 million Swiss francs in 2010. 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 2011 relating to the Group's defined benefit plans were 399 million Swiss francs compared to 330 million Swiss francs in 2010. The increase of 21% is primarily due to lower curtailment gains of 15 million Swiss francs compared to 95 million Swiss francs in 2010. In addition there were 8 million Swiss francs of past service costs in 2011 against 29 million Swiss francs past service income in 2010. These resulted mostly from various one-off plan amendments across the Group. Based on the revised actuarial assumptions at the end of 2011, total pension expenses for 2012 are expected to be broadly stable compared to 2011.

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)

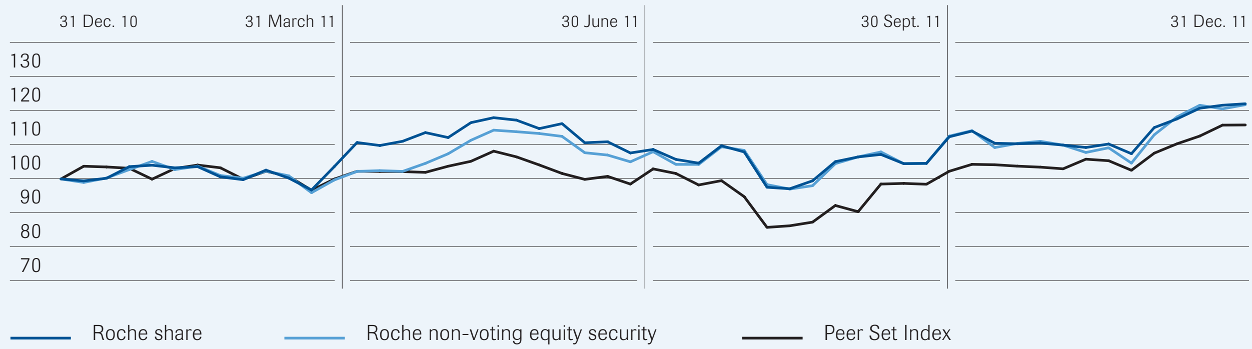
	2011	2010	% change (CHF)
Share price (CHF)	166.60	142.80	+17
Non-voting equity security *(Genussschein)* price (CHF)	159.20	137.00	+16
Market capitalisation (billions of CHF)	136	118	+16

Roche ranked number 6 among a peer group of 16 healthcare companies[1] as listed below, in terms of Total Shareholder Return (TSR), i.e. share price growth plus dividends, in 2011 when measured in Swiss francs at actual exchange rates. At constant exchange rate Roche also ranked number 6. Year-end return was +22% for the Roche share and +22% for the Roche non-voting equity security. The combined performance of share and non-voting equity security was +22% compared to a weighted average return for the peer group of +16% at both actual and constant exchange rates.

Share prices in healthcare outperformed many other sectors in 2011 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 2011: 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 3% in the dividend for 2011 to 6.80 Swiss francs per share and non-voting equity security (2010: 6.60 Swiss francs) for approval at the Annual General Meeting. This is the 25th consecutive increase in the dividend. If the dividend proposal is approved by shareholders, dividend payments on the shares and non-voting equity securities in issue will amount to 5.9 billion Swiss francs (2010: 5.7 billion Swiss francs), resulting in a pay-out ratio (based on core net income) of 55.3% (2010: 52%). Based on the prices at year-end 2011, the dividend yield on the Roche share is 4.1% (2010: 4.6%) and the yield on the non-voting equity security is 4.3% (2010: 4.8%). Further information on the Roche securities is given on pages 152–153 of the Finance Report.

Information per share and non-voting equity security

	2011 (CHF)	2010 (CHF)	% change (CHF)
Basic EPS	11.01	10.14	+9
Diluted EPS	10.98	10.11	+9
Core EPS	12.30	12.78	–4
Equity attributable to Roche shareholders per share	14.27	11.12	+28
Dividend per share	6.80	6.60	+3

For further details please refer to Notes 27 and 28 of the Consolidated Financial Statements and pages 146–149 of the Finance Report. The pay-out ratio is calculated as dividend per share divided by core earnings per share.

Roche bonds and notes

To finance the Genentech transaction in 2009, the Group issued bonds and notes equivalent to 48.2 billion Swiss francs in February and March of that year. Of the debt raised in early 2009, 42% had already been repaid by 31 December 2011. This includes:

- an early redemption of 1.0 billion US dollars of notes that were originally due 1 March 2014 on 24 March 2011.
- a repurchase of 962 million euros of notes originally due 4 March 2013 on 28 June 2011 following a tender offer.
- a repurchase of 302 million Swiss francs of notes originally due 23 March 2012 on 2 November 2011 following a tender offer.
- a repurchase of 350 million pounds sterling of notes originally due 4 March 2015 on 5 December 2011 following a tender offer.
- a repurchase of 50 million pounds sterling of notes originally due 29 August 2023 on 5 December 2011 following a tender offer.

The maturity schedule of the Group's bonds and notes outstanding at 31 December 2011 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 2011 by contractual maturity

	US dollar principal (mUSD)	Euro principal (mEUR)	Pound sterling principal (mGBP)	Swiss franc principal (mCHF)	Total [1] (mUSD)	Total [1] (mCHF)
2012	–	–	–	2,198[2]	2,339	2,198
2013	–	4,288[2]	–	–	5,558	5,224
2014	1,750	–	–	–	1,750	1,645
2015	1,000	–	900[2]	–	2,387	2,244
2016	–	2,750[2]	–	–	3,565	3,350
2017–2021	4,500	1,750[2]	–	1,500	8,364	7,862
2022 and beyond	3,000	–	200	–	3,308	3,109
Total	**10,250**	**8,788**	**1,100**	**3,698**	**27,271**	**25,632**

1) Total translated at 31 December 2011 exchange rates.
2) The proceeds from these bonds and notes were swapped into US dollars, and therefore in the financial statements the bonds and notes 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 the ongoing business. In 2011 the free cash flow was 3.9 billion Swiss francs, which includes the cash generated from operations, as well as payment of interest, tax and dividends. In the second half of 2011 free cash flow was an inflow of 4.9 billion Swiss francs, while in the first half of 2011 free cash flow was an outflow of 1.0 billion Swiss francs, which included 5.6 billion Swiss francs used for the payment of the annual dividend.

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 into with the derivative counterparties to mitigate counterparty risk.

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 a committed credit line of 3.9 billion euros available as back-stop line. Commercial paper notes totalling 1.1 billion US dollars were outstanding as of 31 December 2011. For longer-term financing the Group maintains strong long-term investment-grade credit ratings of AA– by Standard & Poor's and A1 by Moody's, upgraded from A2 in September 2011. These should facilitate efficient access to international capital markets.

Credit ratings for the Roche Group at 31 December 2011

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

Financial risks

As at 31 December 2011 the Group has a net debt position of 16 billion Swiss francs (31 December 2010: 19 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

	2011 (mCHF)	2011 (% of total)	2010 (mCHF)	2010 (% of total)
Cash and cash equivalents	3,854	34	1,841	17
Money market instruments	5,764	51	7,174	66
Bonds, debentures and other investments	1,428	13	1,614	15
Shares	241	2	272	2
Total cash and marketable securities	**11,287**	**100**	**10,901**	**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 11.0 billion Swiss francs 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.

The Group has trade receivables of 10.3 billion Swiss francs. Since the beginning of 2010 there have been increasing financial difficulties in certain Southern European countries, including Spain, Italy, Portugal and Greece. The Group is a leading supplier in these countries and has trade receivables of 2.1 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 delivery against cash to some public hospitals in Greece.

In the second half of 2010 the Group accepted an offer made by the Greek government to settle 0.4 billion euros of trade receivables with zero coupon government bonds, redeemable between 2011 and 2013. The Group has sold the vast majority of the bonds during 2011. The remaining bonds have a carrying value of 5 million Swiss francs. The accounts receivables in scope of the bond settlement had already been provided for at 31 December 2010 to reflect the bond settlement terms when those had become available. The settlement terms implied a discount of 114 million euros, an average discount of 26%, included in the 2009 and 2010 results. During 2011 the total financial result on the trade receivables and zero coupon bonds in scope of the settlement was an expense of 2 million Swiss francs. This includes interest income, gains and losses on sale of bonds, and impairments of the remaining positions to market value at 31 December 2011.

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 26.9 billion Swiss francs at 31 December 2011, Roche enjoys strong long-term investment-grade credit ratings of AA– by Standard & Poor's and A1 by Moody'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 5.2 billion Swiss francs (31 December 2010: 4.5 billion Swiss francs) of which 4.8 billion Swiss francs serve as back-stop line for the commercial paper programme. As at 31 December 2011 no debt has been drawn under these credit lines.

Market risks. 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 2011 (mCHF)	31 December 2010 (mCHF)
VaR – Interest rate component	301	466
VaR – Foreign exchange component	49	44
VaR – Other price component	35	34
Diversification	(69)	(77)
VaR – Total	**316**	**467**

The interest rate VaR decreased reflecting the ageing of debt and the repayment of debt during 2011. 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 increased slightly due to lower diversification effects. Other price risk arises mainly from movements in the prices of equity securities and remained largely stable. At 31 December 2011 the Group held equity securities with a market value of 0.4 billion Swiss francs (31 December 2010: 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 2011 the Group has implemented various other amendments to existing standards and interpretations, which have no material impact on the Group's overall results and financial position. During 2011 various new standards were 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 initial 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 directly in equity. 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. Based on an initial review the Group estimates that, had this method been applied to the 2011 consolidated financial statements, net financial income would have been approximately 130 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 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				9,343
– Non-controlling interests				201
Earnings per share and non-voting equity security [28]				
Basic (CHF)				11.01
Diluted (CHF)				10.98

Roche Group consolidated income statement for the year ended 31 December 2010 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2]	37,058	10,415	–	47,473
Royalties and other operating income [2]	1,537	157	–	1,694
Cost of sales	(8,169)	(5,124)	–	(13,293)
Marketing and distribution	(6,964)	(2,524)	–	(9,488)
Research and development [2]	(9,090)	(936)	–	(10,026)
General and administration	(2,071)	(409)	(394)	(2,874)
Operating profit [2]	**12,301**	**1,579**	**(394)**	**13,486**
Associates [14]				(3)
Financial income [4]				557
Financing costs [4]				(2,829)
Profit before taxes				**11,211**
Income taxes [5]				(2,320)
Net income				**8,891**
Attributable to				
– Roche shareholders				8,666
– Non-controlling interests				225
Earnings per share and non-voting equity security [28]				
Basic (CHF)				10.14
Diluted (CHF)				10.11

Roche Group consolidated statement of comprehensive income in millions of CHF

	Year ended 31 December 2011	2010
Net income recognised in income statement	**9,544**	**8,891**
Other comprehensive income		
Available-for-sale investments [27]	(52)	17
Cash flow hedges [27]	72	(193)
Currency translation of foreign operations [27]	7	(498)
Defined benefit post-employment plans [27]	(840)	(266)
Other comprehensive income, net of tax	**(813)**	**(940)**
Total comprehensive income	**8,731**	**7,951**
Attributable to		
– Roche shareholders [27]	8,418	7,714
– Non-controlling interests [29]	313	237
Total	**8,731**	**7,951**

Roche Group consolidated balance sheet in millions of CHF

	31 December 2011	31 December 2010	31 December 2009
Non-current assets			
Property, plant and equipment [11]	16,201	16,729	17,697
Goodwill [12]	7,843	7,722	8,261
Intangible assets [13]	5,126	5,133	6,005
Associates [14]	24	13	16
Financial long-term assets [15]	360	428	481
Other long-term assets [15]	460	456	452
Deferred income tax assets [5]	2,762	2,368	2,573
Post-employment benefit assets [9]	568	559	601
Total non-current assets	**33,344**	**33,408**	**36,086**
Current assets			
Inventories [16]	5,060	4,972	5,648
Accounts receivable [17]	9,799	9,403	10,461
Current income tax assets [5]	222	168	244
Other current assets [18]	1,864	2,168	3,577
Marketable securities [19]	7,433	9,060	16,107
Cash and cash equivalents [20]	3,854	1,841	2,442
Total current assets	**28,232**	**27,612**	**38,479**
Total assets	**61,576**	**61,020**	**74,565**
Non-current liabilities			
Long-term debt [26]	(23,459)	(27,857)	(36,143)
Deferred income tax liabilities [5]	(604)	(885)	(1,099)
Post-employment benefit liabilities [9]	(5,520)	(4,367)	(4,726)
Provisions [24]	(991)	(934)	(700)
Other non-current liabilities [25]	(310)	(337)	(416)
Total non-current liabilities	**(30,884)**	**(34,380)**	**(43,084)**
Current liabilities			
Short-term debt [26]	(3,394)	(2,201)	(6,273)
Current income tax liabilities [5]	(2,206)	(2,037)	(2,478)
Provisions [24]	(1,742)	(2,146)	(1,618)
Accounts payable [21]	(2,053)	(2,068)	(2,300)
Accrued and other current liabilities [22]	(6,815)	(6,526)	(9,398)
Total current liabilities	**(16,210)**	**(14,978)**	**(22,067)**
Total liabilities	**(47,094)**	**(49,358)**	**(65,151)**
Total net assets	**14,482**	**11,662**	**9,414**
Equity			
Capital and reserves attributable to Roche shareholders [27]	12,095	9,469	7,366
Equity attributable to non-controlling interests [29]	2,387	2,193	2,048
Total equity	**14,482**	**11,662**	**9,414**

Roche Group consolidated statement of cash flows in millions of CHF

	Year ended 31 December 2011	2010
Cash flows from operating activities		
Cash generated from operations [30]	18,038	19,436
(Increase) decrease in working capital	(1,166)	(1,266)
Payments made for defined benefit post-employment plans [9]	(430)	(334)
Utilisation of provisions [24]	(948)	(729)
Disposal of products	50	30
Other operating cash flows	4	(6)
Cash flows from operating activities, before income taxes paid	**15,548**	**17,131**
Income taxes paid	(2,594)	(2,789)
Total cash flows from operating activities	**12,954**	**14,342**
Cash flows from investing activities		
Purchase of property, plant and equipment	(1,959)	(2,671)
Purchase of intangible assets	(246)	(339)
Disposal of property, plant and equipment	349	112
Disposal of intangible assets	–	–
Business combinations [6]	(451)	(504)
Divestment of subsidiaries [33]	(19)	–
Interest and dividends received [30]	42	59
Sales of marketable securities	32,790	43,057
Purchases of marketable securities	(30,808)	(36,345)
Other investing cash flows	(51)	165
Total cash flows from investing activities	**(353)**	**3,534**
Cash flows from financing activities		
Proceeds from issue of bonds and notes [26]	–	–
Redemption and repurchase of bonds and notes [26]	(4,019)	(8,625)
Increase (decrease) in commercial paper [26]	808	(86)
Increase (decrease) in other debt [26]	19	(51)
Hedging and collateral arrangements [26]	338	(1,717)
Equity contribution by non-controlling interests [29]	–	14
Interest paid	(1,550)	(1,931)
Dividends paid	(5,742)	(5,265)
Equity-settled equity compensation plans, net of transactions in own equity instruments [10]	(578)	(773)
Other financing cash flows	–	–
Total cash flows from financing activities	**(10,724)**	**(18,434)**
Net effect of currency translation on cash and cash equivalents	136	(43)
Increase (decrease) in cash and cash equivalents	**2,013**	**(601)**
Cash and cash equivalents at 1 January	1,841	2,442
Cash and cash equivalents at 31 December [20]	**3,854**	**1,841**

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

	Share capital	Retained earnings	Reserves: Fair value	Reserves: Hedging	Reserves: Translation	Total	Non-controlling interests	Total equity
Year ended 31 December 2010								
At 1 January 2010	**160**	**11,835**	**99**	**65**	**(4,793)**	**7,366**	**2,048**	**9,414**
Net income recognised in income statement	–	8,666	–	–	–	8,666	225	8,891
Available-for-sale investments	–	–	18	–	–	18	(1)	17
Cash flow hedges	–	–	–	(193)	–	(193)	–	(193)
Currency translation of foreign operations	–	–	(11)	3	(519)	(527)	29	(498)
Defined benefit post-employment plans	–	(250)	–	–	–	(250)	(16)	(266)
Total comprehensive income	**–**	**8,416**	**7**	**(190)**	**(519)**	**7,714**	**237**	**7,951**
Dividends	–	(5,144)	–	–	–	(5,144)	(107)	(5,251)
Equity compensation plans, net of transactions in own equity instruments	–	(467)	–	–	–	(467)	1	(466)
Changes in non-controlling interests	–	–	–	–	–	–	–	–
Equity contribution by non-controlling interests [29]	–	–	–	–	–	–	14	14
Other movements	–	(90)	68	22	–	–	–	–
At 31 December 2010	**160**	**14,550**	**174**	**(103)**	**(5,312)**	**9,469**	**2,193**	**11,662**
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	–	–	–	–	–	–	–	–
Equity contribution by non-controlling interests [29]	–	–	–	–	–	–	–	–
At 31 December 2011	**160**	**17,265**	**124**	**(20)**	**(5,434)**	**12,095**	**2,387**	**14,482**

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 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 24 January 2012 and are subject to approval by the Annual General Meeting of shareholders on 6 March 2012.

The preparation of the consolidated 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.

Changes in accounting policies that arise from the application of new or revised standards and interpretations are applied retrospectively, unless otherwise specified in the transitional requirements of the particular standard or interpretation. 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. In some cases the transitional requirements of the particular standard or interpretation specify that the changes are to be applied prospectively. 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. In addition comparatives have been reclassified or extended from the previously reported results to take into account any presentational changes.

Consolidation policy

These financial statements are the consolidated 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 and finance, including treasury, taxes and pension fund management. Also included are corporate legal and corporate 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 ongoing 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 assess 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 in the country concerned. 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 Genentech (prior to the Genentech transaction) and 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 recorded as the surplus of the consideration transferred over the Group's interest in the fair value of the acquired net assets. Any goodwill and fair value adjustments are recorded as assets and liabilities of the acquired business in the functional currency of that business. 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 assessed for possible impairment at each reporting date and is additionally tested annually for 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 pre-tax 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 amount for which a financial asset, liability or instrument could be exchanged between knowledgeable and willing parties in an arm's length transaction. 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 Consolidated 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.

Discontinued businesses and non-current assets-held-for-sale

A discontinued business is a component of the Group's business that represents a separate major line of business or geographical area of operations or is a subsidiary acquired exclusively with a view to resale. Reclassification as a discontinued business occurs upon disposal or when the operation meets the criteria to be classified as held-for-sale, if earlier.

A disposal group is a group of assets that are to be disposed of as a group in a single transaction, together with the liabilities directly associated with those assets that will be transferred in the transaction. The assets and liabilities in a disposal group are reclassified as held-for-sale if their value will be recovered principally through a sale rather than through continuing use. The disposal group must be available for sale in its current condition and the sale must be highly probable.

Immediately before classification as held-for-sale, the measurement of all assets and liabilities in a disposal group is updated in accordance with applicable accounting policies. Then, on initial classification as held for sale, disposal groups are recognised at the lower of carrying value and fair value less costs to sell. Impairment losses on initial classification as held-for-sale are included in the income statement.

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 consolidated 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 consideration transferred has to be allocated to the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business, with any residual recorded as 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 consolidated 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 ongoing 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 2011 total 1,497 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 and accruals for doubtful receivables, which at 31 December 2011 total 431 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 and accruals 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 16,201 million Swiss francs as disclosed in Note 11. Goodwill has a carrying value of 7,843 million Swiss francs (see Note 12) and intangible assets have a carrying value of 5,126 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 2011 the present value of the Group's defined benefit obligation is 12,428 million Swiss francs for funded plans and 3,249 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 proceedings, including claims arising from trade, and the most significant matters are described in Note 24. Legal provisions at 31 December 2011 total 746 million Swiss francs. Management believes that the total provisions for legal proceedings 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. 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.

Environmental provisions. The Group has provisions for environmental remediation costs, which at 31 December 2011 total 265 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 2011 the net liability for current income taxes is 1,984 million Swiss francs and the net asset for deferred income taxes is 2,158 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 IFRS implemented in 2011. 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. During 2011 the following new standards were issued by the International Accounting Standards Board (IASB), which should be implemented at the latest by 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'.

In addition further revisions were issued to IFRS 9 'Financial Instruments'. The implementation date of this standard has now been deferred to 2015 at the latest.

The Group is currently assessing the potential impacts of these and other new and revised standards and interpretations that will be effective from 1 January 2012 and beyond, and which the Group has not early adopted. 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 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. Based on an initial review the Group estimates that, had this method been applied to the 2011 consolidated financial statements, net financial income would have been approximately 130 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 2011	Pharmaceuticals 2010	Diagnostics 2011	Diagnostics 2010	Corporate 2011	Corporate 2010	Group 2011	Group 2010
Revenues from external customers								
Sales	32,794	37,058	9,737	10,415	–	–	42,531	47,473
Royalties and other operating income	1,453	1,537	129	157	–	–	1,582	1,694
Total	**34,247**	**38,595**	**9,866**	**10,572**	**–**	**–**	**44,113**	**49,167**
Revenues from other operating segments								
Sales	–	3	11	14	–	–	11	17
Royalties and other operating income	–	–	–	–	–	–	–	–
Elimination of inter-divisional revenue							(11)	(17)
Total	**–**	**3**	**11**	**14**	**–**	**–**	**–**	**–**
Segment results								
Operating profit	12,251	12,301	1,656	1,579	(453)	(394)	13,454	13,486
Capital expenditure								
Business combinations	246	430	356	372	–	–	602	802
Additions to property, plant and equipment	1,049	1,464	956	1,150	1	49	2,006	2,663
Additions to intangible assets	236	288	10	50	–	–	246	338
Total capital expenditure	**1,531**	**2,182**	**1,322**	**1,572**	**1**	**49**	**2,854**	**3,803**
Research and development								
Research and development costs	7,397	9,090	929	936	–	–	8,326	10,026
Other segment information								
Depreciation of property, plant and equipment	1,079	1,151	763	775	6	7	1,848	1,933
Amortisation of intangible assets	152	175	368	444	–	–	520	619
Impairment of property, plant and equipment	93	109	3	29	–	–	96	138
Impairment of goodwill	–	–	–	–	–	–	–	–
Impairment of intangible assets	79	634	59	33	–	–	138	667
Impairment of net assets-held-for-sale	117	–	–	–	–	–	117	–
Equity compensation plan expenses	317	241	36	38	18	13	371	292

Pharmaceuticals sub-divisional information in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
	2011	2010	2011	2010	2011	2010
Revenues from external customers						
Sales	28,977	32,739	3,817	4,319	32,794	37,058
Royalties and other operating income	1,407	1,530	46	7	1,453	1,537
Total	**30,384**	**34,269**	**3,863**	**4,326**	**34,247**	**38,595**
Revenues from other operating segments						
Sales	825	1,050	228	151	1,053	1,201
Royalties and other operating income	22	20	50	43	72	63
Elimination of income within division					(1,125)	(1,261)
Total	**847**	**1,070**	**278**	**194**	**–**	**3**
Segment results						
Sub-divisional profit	11,743	11,641	593	788	12,336	12,429
Elimination of profit within division					(85)	(128)
Operating profit	**11,743**	**11,641**	**593**	**788**	**12,251**	**12,301**
Capital expenditure						
Business combinations	246	430	–	–	246	430
Additions to property, plant and equipment	872	1,234	177	230	1,049	1,464
Additions to intangible assets	229	288	7	–	236	288
Total capital expenditure	**1,347**	**1,952**	**184**	**230**	**1,531**	**2,182**
Research and development						
Research and development costs	6,622	8,332	795	786	7,417	9,118
Elimination of costs within division					(20)	(28)
Total	**6,622**	**8,332**	**795**	**786**	**7,397**	**9,090**
Other segment information						
Depreciation of property, plant and equipment	938	994	141	157	1,079	1,151
Amortisation of intangible assets	83	102	69	73	152	175
Impairment of property, plant and equipment	77	107	16	2	93	109
Impairment of goodwill	–	–	–	–	–	–
Impairment of intangible assets	79	634	–	–	79	634
Impairment of net assets-held-for-sale	117	–	–	–	117	–
Equity compensation plan expenses	314	238	3	3	317	241

Net operating assets in millions of CHF

	Assets			Liabilities			Net assets		
	2011	2010	2009	2011	2010	2009	2011	2010	2009
Pharmaceuticals	27,877	28,546	31,068	(7,869)	(8,185)	(8,885)	20,008	20,361	22,183
Diagnostics	18,136	17,454	19,027	(2,613)	(2,404)	(2,340)	15,523	15,050	16,687
Corporate	162	172	152	(202)	(214)	(199)	(40)	(42)	(47)
Total operating	**46,175**	**46,172**	**50,247**	**(10,684)**	**(10,803)**	**(11,424)**	**35,491**	**35,369**	**38,823**
Non-operating	15,401	14,848	24,318	(36,410)	(38,555)	(53,727)	(21,009)	(23,707)	(29,409)
Group	**61,576**	**61,020**	**74,565**	**(47,094)**	**(49,358)**	**(65,151)**	**14,482**	**11,662**	**9,414**

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 2011	Assets 2010	Assets 2009	Liabilities 2011	Liabilities 2010	Liabilities 2009	Net assets 2011	Net assets 2010	Net assets 2009
Roche Pharmaceuticals	23,542	24,223	26,686	(7,119)	(7,517)	(7,901)	16,423	16,706	18,785
Chugai	5,088	4,955	4,879	(750)	(668)	(984)	4,338	4,287	3,895
Elimination within division	(753)	(632)	(497)	–	–	–	(753)	(632)	(497)
Pharmaceuticals Division	**27,877**	**28,546**	**31,068**	**(7,869)**	**(8,185)**	**(8,885)**	**20,008**	**20,361**	**22,183**

Information by geographical area in millions of CHF

	Revenues from external customers: Sales	Revenues from external customers: Royalties and other operating income	Non-current assets: Property, plant and equipment	Non-current assets: Goodwill and intangible assets
2011				
Switzerland	507	190	3,169	1,912
European Union	12,815	54	4,210	1,913
– *of which Germany*	*2,595*	*47*	*3,030*	*1,871*
Rest of Europe	1,486	2	47	1
Europe	**14,808**	**246**	**7,426**	**3,826**
United States	14,133	1,283	5,204	8,465
Rest of North America	1,047	2	109	86
North America	**15,180**	**1,285**	**5,313**	**8,551**
Latin America	3,115	1	460	15
Japan	4,314	46	1,872	383
Rest of Asia	3,616	4	1,025	191
Asia	**7,930**	**50**	**2,897**	**574**
Africa, Australia and Oceania	1,498	–	105	3
Total	**42,531**	**1,582**	**16,201**	**12,969**
2010				
Switzerland	464	221	3,032	1,923
European Union	14,596	59	4,261	1,785
– *of which Germany*	*2,970*	*59*	*3,097*	*1,740*
Rest of Europe	1,630	2	42	1
Europe	**16,690**	**282**	**7,335**	**3,709**
United States	16,446	1,372	5,849	8,394
Rest of North America	1,051	16	118	88
North America	**17,497**	**1,388**	**5,967**	**8,482**
Latin America	3,397	12	476	17
Japan	4,718	7	1,848	427
Rest of Asia	3,591	5	991	218
Asia	**8,309**	**12**	**2,839**	**645**
Africa, Australia and Oceania	1,580	–	112	2
Total	**47,473**	**1,694**	**16,729**	**12,855**

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 2011.

Major customers

The US national wholesale distributor, AmerisourceBergen Corp., represented approximately 5 billion Swiss francs (2010: 6 billion Swiss francs) of the Group's revenues. Approximately 99% 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 distributors, Cardinal Health, Inc. and McKesson Corp., 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 2011 the Group's interest in Chugai was 61.6% (2010: 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 2011 totalled 100 million Swiss francs (2010: 99 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

	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 2011	2010
Gains on sale of equity securities	106	119
(Losses) on sale of equity securities	(6)	(11)
Dividend income	1	2
Gains (losses) on equity security derivatives, net	1	3
Write-downs and impairments of equity securities	(38)	(19)
Net income from equity securities	**64**	**94**
Interest income	73	51
Gains on sale of debt securities	31	17
(Losses) on sale of debt securities	(17)	(4)
Gains (losses) on debt security derivatives, net	–	–
Write-downs and impairments of long-term loans	(16)	–
Net interest income and income from debt securities	**71**	**64**
Expected return on plan assets of defined benefit plans [9]	500	562
Foreign exchange gains (losses), net	(103)	(143)
Gains (losses) on foreign currency derivatives, net	123	(4)
Net foreign exchange gains (losses)	**20**	**(147)**
Net other financial income (expense)	(8)	(16)
Total financial income	**647**	**557**

Financing costs in millions of CHF

	Year ended 31 December 2011	2010
Interest expense	(1,441)	(1,849)
Amortisation of debt discount [26]	(35)	(47)
Gains (losses) on debt derivatives, net	–	(1)
Gains (losses) on redemption and repurchase of bonds and notes, net [26]	(172)	(255)
Time cost of provisions [24]	(15)	(20)
Interest cost of defined benefit plans [9]	(565)	(657)
Total financing costs	**(2,228)**	**(2,829)**

Net financial income in millions of CHF

	Year ended 31 December 2011	2010
Financial income	647	557
Financing costs	(2,228)	(2,829)
Net financial income	**(1,581)**	**(2,272)**
Financial result from Treasury management	(1,516)	(2,177)
Financial result from Pension management	(65)	(95)
Net financial income	**(1,581)**	**(2,272)**

5. Income taxes

Income tax expenses in millions of CHF

	2011	2010
Current income taxes	(2,693)	(2,569)
Adjustments recognised for current tax of prior periods	(5)	16
Deferred income taxes	357	233
Total income (expense)	**(2,341)**	**(2,320)**

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 average expected rate decreased in 2011 compared to 2010. The main driver of the decrease comes from Japan, which has a relatively higher local tax rate than the average Group rate. The Group's taxable profits in Japan decreased in 2011 which resulted in a decrease in the percentage Japan contributes to the overall mix of the Group's profit. The lower profit in Japan is mainly due to direct and indirect effects of the East Japan Earthquake on Chugai's results as discussed in Note 3. There were no significant local tax rate changes in the main operating areas of the Group compared to 2010, besides a decrease of the statutory tax rate in Basel, Switzerland. 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

	2011	2010
Average expected tax rate	19.6%	20.2%
Tax effect of		
– Non-taxable income/non-deductible expenses	+1.1%	+0.9%
– Equity compensation plans	–0.1%	+0.7%
– Research, development and other manufacturing tax credits	–2.1%	–2.7%
– US state tax impacts	+0.9%	+1.4%
– Other differences	+0.3%	+0.2%
Group's effective tax rate	**19.7%**	**20.7%**

The main contributors to the decrease in the Group's effective tax rate compared to 2010 were the lower average expected tax rate discussed above, increased equity compensation plan tax benefits and lower US state tax impacts. These items were partially offset by an increase in non-deductible expenses as well as a lower research and development tax credit impact.

Non-deductible expenses in 2011 increased from 2010 mainly due to the newly introduced US Branded Pharmaceutical Product Fee. The impact from equity compensation plans on the effective tax rate 2011 was a decrease of 0.1%, while in 2010 it was an increase of 0.7%. This is mainly due to the increase in the price of the underlying equity. Changes in US state tax legislation resulted in a lower US state tax rate compared to 2010.

The income tax benefits recorded in respect of equity compensation plans, which varies according to the price of the underlying equity, was 120 million Swiss francs (2010: 6 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 112 million Swiss francs (2010: 89 million Swiss francs) would have been recorded.

Tax effects of other comprehensive income in millions of CHF

	2011 Pre-tax amount	2011 Tax benefit	2011 After-tax amount	2010 Pre-tax amount	2010 Tax benefit	2010 After-tax amount
Available-for-sale investments	(79)	27	(52)	11	6	17
Cash flow hedges	112	(40)	72	(300)	107	(193)
Currency translation of foreign operations	7	–	7	(498)	–	(498)
Defined benefit post-employment plans	(1,190)	350	(840)	(346)	80	(266)
Other comprehensive income	**(1,150)**	**337**	**(813)**	**(1,133)**	**193**	**(940)**

Income tax assets (liabilities) in millions of CHF

	2011	2010	2009
Current income taxes			
– Assets	222	168	244
– Liabilities	(2,206)	(2,037)	(2,478)
Net current income tax assets (liabilities)	**(1,984)**	**(1,869)**	**(2,234)**
Deferred income taxes			
– Assets	2,762	2,368	2,573
– Liabilities	(604)	(885)	(1,099)
Net deferred income tax assets (liabilities)	**2,158**	**1,483**	**1,474**

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

	2011	2010
Net current income tax asset (liability) at 1 January	(1,869)	(2,234)
Income taxes paid	2,594	2,789
(Charged) credited to the income statement		
– Current income taxes	(2,693)	(2,569)
– Adjustments recognised for current tax of prior periods	(5)	16
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	2	9
Currency translation effects and other	(13)	120
Net current income tax asset (liability) at 31 December	**(1,984)**	**(1,869)**

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

	2011 Amount (mCHF)	2011 Applicable tax rate	2010 Amount (mCHF)	2010 Applicable tax rate
Within one year	–	–	16	26%
Between one and five years	193	17%	70	17%
More than five years	2,210	6%	1,522	9%
Total unrecognised tax losses	**2,403**	**7%**	**1,608**	**9%**

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 unremitted earnings of the Group were 24.8 billion Swiss francs at 31 December 2011 (2010: 26.5 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, and intangible assets	Other temporary differences	Total
Year ended 31 December 2010			
At 1 January 2010	(2,606)	4,080	1,474
Business combinations [6]	(187)	30	(157)
(Charged) credited to the income statement	120	113	233
(Charged) credited to other comprehensive income [27]	–	193	193
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	–	(34)	(34)
Currency translation effects and other	234	(460)	(226)
At 31 December 2010	**(2,439)**	**3,922**	**1,483**
Year ended 31 December 2011			
At 1 January 2011	(2,439)	3,922	1,483
Business combinations [6]	(121)	29	(92)
(Charged) credited to the income statement	197	160	357
(Charged) credited to other comprehensive income [27]	–	337	337
(Charged) credited to equity from equity compensation plans and other transactions with shareholders	–	43	43
Currency translation effects and other	(3)	33	30
At 31 December 2011	**(2,366)**	**4,524**	**2,158**

6. Business combinations

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 2012 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 2011 the amount recognised for this arrangement was 31 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 2011 the amount recognised for this arrangement was 51 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 and Diagnostics operating segment (3 million Swiss francs and 1 million Swiss francs, respectively).

Acquisitions – 2011: impact on results in millions of CHF

	Revenues from external customers	Inventory fair value adjustment	Amortisation of intangible assets	Operating profit	Net income
Impact on reported results					
Anadys	–	–	–	(2)	(1)
Pharmaceuticals Division	**–**	**–**	**–**	**(2)**	**(1)**
PVT	8	–	(9)	(9)	(6)
mtm laboratories	3	–	(6)	(7)	(4)
Diagnostics Division	**11**	**–**	**(15)**	**(16)**	**(10)**
Group	**11**	**–**	**(15)**	**(18)**	**(11)**
Estimated impact on results if acquisition assumed effective 1 January 2011					
Anadys	–	–	–	(24)	(14)
Pharmaceuticals Division	**–**	**–**	**–**	**(24)**	**(14)**
PVT	16	–	(13)	(14)	(8)
mtm laboratories	9	–	(17)	(22)	(15)
Diagnostics Division	**25**	**–**	**(30)**	**(36)**	**(23)**
Group	**25**	**–**	**(30)**	**(60)**	**(37)**

The figures exclude the directly-attributable transaction costs referred to above, and in addition exclude integration costs of 2 million Swiss francs related to acquisitions by the Diagnostics Division. Corresponding tax impacts are also excluded.

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)**

Future acquisitions. On 2 December 2011 the Group announced that it had entered into an agreement to acquire a 100% controlling interest in Verum Diagnostica GmbH, ('Verum'), for a purchase consideration of 11 million euros in cash and up to 2 million euros from a contingent consideration arrangement. Based in Munich, Germany, Verum is a privately held company specialised in coagulation diagnostics with a focus on platelet function testing, the most rapidly growing field in the coagulation market. 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 transaction closed effective 3 January 2012 and Verum will be reported as part of the Diagnostics operating segment. The initial accounting for the transaction was not complete at the date these consolidated financial statements were approved for issue by the Board of Directors on 24 January 2012 and therefore various disclosures, including the fair value of the net assets acquired, cannot be made.

Acquisitions – 2010

Marcadia. Effective 29 December 2010 the Group acquired a 100% controlling interest in Marcadia Biotech, Inc., ('Marcadia'), a privately owned US company based in Carmel, Indiana. Marcadia is a biopharmaceutical company focused on developing a broad portfolio of drug candidates for the treatment of diabetes and obesity. Marcadia is now reported as part of the Roche Pharmaceuticals operating segment. The total purchase consideration was 377 million US dollars, of which 287 million US dollars were paid in cash and 90 million US dollars arose from a contingent consideration arrangement. The payment from this arrangement is based on the achievement of two separate performance milestones that may arise between 2013 and 2015 and the range of outcomes, undiscounted, is between zero and 250 million US dollars. A liability of 86 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 2011 the amount recognised for this arrangement was 45 million Swiss francs based on the most recent management estimates and reflecting closing balance sheet foreign exchange rates. The accounting for the Marcadia acquisition, which was provisional at the end of 2010, was finalised during the first half of 2011. There were no adjustments made in 2011 to the provisional acquisition accounting reported in the 2010 Annual Financial Statements.

Medingo. Effective 28 May 2010 the Group acquired a 100% controlling interest in Medingo Ltd. ('Medingo'), a majority-owned subsidiary of the Elron group, based in Israel. Medingo is engaged in the development of a semi-disposable insulin patch pump and is reported as part of the Diagnostics operating segment. The total purchase consideration was 183 million US dollars, of which 155 million US dollars were paid in cash and 28 million US dollars arose from a contingent consideration arrangement. The payment from this arrangement is based on the achievement of four separate performance milestones that may arise between 2012 and 2014 and the range of outcomes, undiscounted, is between zero and 42 million US dollars. 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 2011 the amount recognised for this arrangement was 25 million Swiss francs based on the most recent management estimates, reflecting payments made during 2011 and closing balance sheet foreign exchange rates.

BioImagene. Effective 3 September 2010 the Group acquired a 100% controlling interest in BioImagene, Inc., ('BioImagene'), a privately owned US company, based in Sunnyvale, California. BioImagene is engaged in the digital pathology workflow and analysis field and is reported as part of the Diagnostics operating segment. The total purchase consideration was 85 million US dollars in cash.

There were other minor business combinations in the Diagnostics business with a total purchase consideration of 2 million Swiss francs in cash.

The combined purchase consideration of 657 million Swiss francs, consisting of 539 million Swiss francs in cash and 118 million Swiss francs from contingent consideration arrangements, has been allocated as shown in the table below.

Acquisitions – 2010: net assets acquired in millions of CHF

	Carrying value prior to acquisition	Fair value adjustments	Carrying value upon acquisition
Property, plant and equipment	2	–	2
Intangible assets			
– Product intangibles: in use	–	284	284
– Product intangibles: not available for use	–	248	248
– Technology intangibles: in use	–	4	4
Inventories	2	–	2
Deferred income taxes	9	(166)	(157)
Cash	35	–	35
Other net assets (liabilities)	(25)	–	(25)
Net identifiable assets (liabilities)	**23**	**370**	**393**
Goodwill			264
Purchase consideration			**657**

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 5 million Swiss francs.

Directly attributable transaction costs of 2 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 and Diagnostics operating segment (1 million Swiss francs each).

Acquisitions – 2010: net cash outflow in millions of CHF

	Cash consideration paid	Cash in acquired company	Net cash Outflow
Acquisitions	(539)	35	(504)
Total	**(539)**	**35**	**(504)**

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 are discounted by between 6% and 7% where the time value of money is material.

Provisions for contingent consideration arrangements in millions of CHF

	2011	2010
At 1 January	132	15
Additional provisions created	1	3
Unused amounts reversed	(50)	–
Utilised during the year	(15)	(3)
Unwinding of discount	5	–
Business combinations		
– PVT	31	–
– mtm laboratories	51	–
– Marcadia	–	86
– Medingo	–	32
– Minor business combinations	–	–
Currency translation effects	(2)	(1)
At 31 December	**153**	**132**
Expected outflow of resources		
– Within one year	45	17
– Between one to two years	55	–
– Between two to three years	53	85
– More than three years	–	30
Total	**153**	**132**

7. Global restructuring plans

Operational Excellence

On 17 November 2010 the Group announced details concerning the Operational Excellence global restructuring plan. The plan is aimed at adapting cost structures to an increasingly challenging market environment and achieving significant efficiency and productivity gains. The planned measures will enable sustained investment in research and product development and thus strengthen the Group's long-term innovation capability.

Effective 13 June 2011 the Group completed the sale of the site at Palo Alto, California, to a third party. The consideration was 204 million Swiss francs in cash, of which 9 million Swiss francs will be paid in 2012. As a result a gain of 45 million Swiss francs was recorded in 2011 within general and administration expenses. The closure or transfer of the research and development activities to other Roche sites from Palo Alto was completed by the end of 2010. The subsidiary Roche Palo Alto LLC, which retains certain residual obligations, was not divested.

During 2011 the Group completed the divestment of certain subsidiaries as part of the Operational Excellence programme. Effective 31 August 2011 the Group completed the sale of the manufacturing site at Boulder, Colorado. The consideration includes certain contingent consideration arrangements based on the future performance of the site. As at 30 June 2011 the net assets sold at Boulder were considered a disposal group and were written down to their fair value less costs to sell. As a result an impairment charge of 117 million Swiss francs was charged to general and administration expenses for the first half of 2011, of which 99 million Swiss francs relates to property, plant and equipment, and a majority of the residual to inventories. In the second half of 2011, a further loss of 15 million Swiss francs was recognised from this disposal. Effective 21 October 2011 the Group sold the research and development site in Madison, Wisconsin including selected research assets. The consideration included an equity stake and contingent consideration arrangements based on the future achievement of specified research and development project milestones. In the second half of 2011 the Group divested the research site in Kulmbach, Germany, and a small property in the Philippines.

The total consideration received for these subsidiary divestments was 14 million Swiss francs. This consisted of 2 million Swiss francs in cash, marketable securities with a fair value of 4 million Swiss francs and deferred cash consideration of 8 million Swiss francs that will be received in 2012. The total loss on divestment of subsidiaries was 105 million Swiss francs and is included in general and administration expenses in the Roche Pharmaceuticals operating segment.

The Group has announced that it will not divest the chemical production facility in Florence, South Carolina, given the unfavourable market for chemical production assets and the Group's expected future capacity requirements for small molecules.

The Group currently anticipates that these restructuring activities will be substantially completed by the end of 2012. The total cost is expected to be in the order of 2.8 billion Swiss francs, which includes 1.3 billion Swiss francs that were already incurred in 2010 and 0.9 billion Swiss francs incurred in 2011.

Operational Excellence: restructuring costs in millions of CHF

	2011	2010
Employee-related costs		
– Termination costs	144	788
– Pensions and other post-employment benefits	(11)	(72)
– Other employee-related costs	33	13
Total employee-related costs	**166**	**729**
Site closure costs		
– Impairment of property, plant and equipment	80	67
– Accelerated depreciation of property, plant and equipment	66	–
– (Gains) losses on disposal of property, plant and equipment	(21)	–
– Other site closure costs	60	51
Total site closure costs	**185**	**118**
Divestment of products and businesses		
– Impairment of net assets-held-for-sale	117	–
– (Gains) losses on divestment of subsidiaries [33]	105	–
Total costs on divestment of products and businesses	**222**	**–**
Impairment of intangible assets	–	424
Other reorganisation expenses	367	72
Total	**940**	**1,343**

Classification of Operational Excellence restructuring costs in millions of CHF

	2011			2010		
	Depreciation, amortisation and impairment	Other costs	Total	Depreciation, amortisation and impairment	Other costs	Total
Cost of sales						
– Roche Pharmaceuticals	46	121	167	34	32	66
– Diagnostics	4	23	27	23	68	91
Marketing and distribution						
– Roche Pharmaceuticals	–	65	65	–	312	312
– Diagnostics	–	5	5	–	5	5
Research and development						
– Roche Pharmaceuticals	83	79	162	424	277	701
– Diagnostics	–	22	22	4	38	42
General and administration						
– Roche Pharmaceuticals	130	326	456	6	107	113
– Diagnostics	–	18	18	–	6	6
– Corporate	–	18	18	–	7	7
Total	**263**	**677**	**940**	**491**	**852**	**1,343**
Total by operating segment						
– Roche Pharmaceuticals	259	591	850	464	728	1,192
– Chugai	–	–	–	–	–	–
– Diagnostics	4	68	72	27	117	144
– Corporate	–	18	18	–	7	7
Total	**263**	**677**	**940**	**491**	**852**	**1,343**

Genentech transaction: restructuring and integration

On 21 July 2008 the Group announced an offer to purchase all outstanding shares of Genentech. Following the closing of the transaction, Genentech's South San Francisco site would become the headquarters of the Group's combined pharmaceuticals operations in the United States. On 21 July 2008 the Group also announced that Roche's pharmaceuticals business in the US would close manufacturing operations at its site in Nutley, New Jersey, and commercial operations would be moved to Genentech. The research site at Palo Alto, California, would be closed with the research activities being transferred to Nutley and to Genentech. Subsequent to these announcements, initial restructuring activities started at the Nutley and Palo Alto sites in 2008. The Genentech transaction was completed effective 26 March 2009. Following this the Pharmaceuticals Division initiated a detailed integration programme to align the Genentech business and the rest of Roche's pharmaceuticals business. These restructuring activities were completed by the end of 2010.

Genentech transaction: restructuring and integration costs in millions of CHF

	2011	2010
Employee-related costs		
– Termination costs	–	43
– Pensions and other post-employment benefits	–	6
– Other retention plans and other employee benefits	–	15
– Other employee-related costs	–	83
Total employee-related costs	**–**	**147**
Site closure costs		
– Impairment of property, plant and equipment	–	23
– Accelerated depreciation of property, plant and equipment	–	55
– Other site closure costs	–	116
Total site closure costs	**–**	**194**
Other reorganisation expenses	–	255
Total	**–**	**596**

8. Employee benefits

Employee remuneration in millions of CHF

	2011	2010
Wages and salaries	7,761	8,775
Social security costs	831	936
Defined contribution post-employment plans	303	305
Operating expenses for defined benefit post-employment plans [9]	334	235
Equity compensation plans [10]	371	292
Termination costs		
– Operational Excellence [7]	144	788
– Genentech transaction: restructuring and integration [7]	–	43
Other employee benefits	491	465
Employee remuneration included in operating results	**10,235**	**11,839**
Expected return on plan assets for defined benefit post-employment plans [9]	(500)	(562)
Interest cost for defined benefit post-employment plans [9]	565	657
Total employee remuneration	**10,300**	**11,934**

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 303 million Swiss francs (2010: 305 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: expenses in millions of CHF

	Pension plans	Other post-employment benefit plans	2011 Total	Pension plans	Other post-employment benefit plans	2010 Total
Current service cost	328	13	341	339	20	359
Past service cost	(8)	16	8	(42)	13	(29)
(Gain) loss on curtailment	(15)	–	(15)	(78)	(17)	(95)
(Gain) loss on settlement	–	–	–	–	–	–
Total operating expenses	**305**	**29**	**334**	**219**	**16**	**235**
Expected return on plan assets	(471)	(29)	(500)	(529)	(33)	(562)
Interest cost	519	46	565	597	60	657
Total financial (income) expense	**48**	**17**	**65**	**68**	**27**	**95**
Total expense recognised in income statement	**353**	**46**	**399**	**287**	**43**	**330**

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

	Funded plans	Unfunded plans	2011 Total	Funded plans	Unfunded plans	2010 Total
Fair value of plan assets	10,622	–	10,622	10,667	–	10,667
Defined benefit obligation	(12,428)	(3,249)	(15,677)	(11,464)	(3,080)	(14,544)
Over (under) funding	**(1,806)**	**(3,249)**	**(5,055)**	**(797)**	**(3,080)**	**(3,877)**
Unrecognised past service costs	(9)	(15)	(24)	(15)	(16)	(31)
Limit on asset recognition	(10)	–	(10)	(4)	–	(4)
Reimbursement rights	137	–	137	83	21	104
Net recognised asset (liability)	**(1,688)**	**(3,264)**	**(4,952)**	**(733)**	**(3,075)**	**(3,808)**
Reported as						
– Defined benefit plans	431	–	431	455	–	455
– Reimbursement rights	137	–	137	83	21	104
Post-employment benefit assets	**568**	**–**	**568**	**538**	**21**	**559**
Post-employment benefit liabilities	(2,256)	(3,264)	(5,520)	(1,271)	(3,096)	(4,367)
Net recognised asset (liability)	**(1,688)**	**(3,264)**	**(4,952)**	**(733)**	**(3,075)**	**(3,808)**

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	Reimburse-ment rights	2011 Total	Fair value of plan assets	Reimburse-ment rights	2010 Total
At 1 January	10,667	104	10,771	10,530	120	10,650
Expected return on plan assets	494	6	500	554	8	562
Actuarial gains (losses)	(474)	21	(453)	249	(9)	240
Currency translation effects and other	53	1	54	(426)	(11)	(437)
Employer contributions	293	–	293	198	(2)	196
Employee contributions	73	–	73	72	–	72
Benefits paid – funded plans	(484)	–	(484)	(510)	–	(510)
Past service cost	–	5	5	–	–	–
Divestment of subsidiaries	–	–	–	–	–	–
Curtailments	–	–	–	–	(2)	(2)
Settlements	–	–	–	–	–	–
At 31 December	**10,622**	**137**	**10,759**	**10,667**	**104**	**10,771**

	2011		2010
Invested as			
– Shares and other equity instruments	3,828		4,160
– Bonds, debentures and other debt instruments	3,876		4,410
– Property	1,160		589
– Other assets	1,895		1,612
Total	**10,759**		**10,771**

Included within the fair value of plan assets are none of the Group's shares (2010: none of the Group's shares) and 565 thousand of the Group's non-voting equity securities with a fair value of 90 million Swiss francs (2010: 601 thousand of the Group's non-voting equity securities with a fair value of 82 million Swiss francs). Also included are debt instruments issued by the Group with a fair value of 11 million Swiss francs (2010: none). Other assets consist mainly of cash, special bonds or equity funds, alternatives, mortgages, commodities and insurance policies.

Defined benefit plans: defined benefit obligation in millions of CHF

	2011 Pension plans	2011 Other post-employment benefit plans	2011 Total	2010 Pension plans	2010 Other post-employment benefit plans	2010 Total
At 1 January	13,620	924	14,544	13,665	1,088	14,753
Current service cost	328	13	341	339	20	359
Interest cost	519	46	565	597	60	657
Employee contributions	73	–	73	72	–	72
Actuarial (gains) losses	578	153	731	646	(62)	584
Currency translation effects and other	23	15	38	(995)	(98)	(1,093)
Benefits paid – funded plans	(450)	(34)	(484)	(462)	(48)	(510)
Benefits paid – unfunded plans	(124)	(13)	(137)	(126)	(12)	(138)
Past service cost	(6)	27	21	(38)	(5)	(43)
Divestment of subsidiaries	–	–	–	–	–	–
Curtailments	(15)	–	(15)	(78)	(19)	(97)
Settlements	–	–	–	–	–	–
At 31 December	**14,546**	**1,131**	**15,677**	**13,620**	**924**	**14,544**
Of which						
– Funded plans	11,491	937	12,428	10,803	661	11,464
– Unfunded plans	3,055	194	3,249	2,817	263	3,080

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. The mortality tables used for the major schemes are:

- Germany: Heubeck tables 2005G.
- Japan: National Census (No. 20 Life Table).
- Switzerland: BVG 2010 generational tables for pensioners and BVG 2010 projected to 2017 for non-pensioners.
- United Kingdom: non-pensioners – S1NA_L table rated up 1.5 years (male) and 0.5 years (female). Future improvements: medium cohort (from 2002) with a 1% underpin (from 2009)
- United Kingdom: pensioners – S1NA_L table rated up 1.5 years. Future improvements: medium cohort (from 2002) with a 1% underpin (from 2009).
- United States: RP2000 projected to 2017.

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

	2011 Weighted average	2011 Range	2010 Weighted average	2010 Range
Discount rates	3.80%	1.80%–8.00%	4.08%	1.60%–7.20%
Expected rates of return on plan assets	4.83%	1.28%–8.70%	5.36%	0.64%–9.75%
Expected rates of salary increases	3.18%	2.00%–5.30%	3.44%	2.00%–6.50%
Expected rates of pension increases	1.08%	0.25%–3.50%	1.10%	0.25%–3.50%
Expected inflation rates	2.64%	2.00%–4.00%	2.66%	0.50%–4.25%
Immediate medical cost trend rate	7.79%	7.40%–7.80%	7.99%	7.60%–8.00%
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

	2011 +0.25%	2011 −0.25%	2010 +0.25%	2010 −0.25%
Current service cost and interest cost	(7)	5	(4)	4
Defined benefit obligation	(525)	561	(482)	512

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 20 million Swiss francs (2010: gain of 803 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

	2011 +1%	2011 –1%	2010 +1%	2010 –1%
Current service cost and interest cost	8	(6)	10	(8)
Defined benefit obligation	134	(108)	104	(86)

Funding summary

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

Defined benefit plans: summary of funding status in millions of CHF

	2011	2010	2009	2008	2007
Funded plans					
– Fair value of plan assets	10,622	10,667	10,530	9,438	12,170
– Defined benefit obligation	(12,428)	(11,464)	(11,267)	(10,504)	(10,646)
Over (under) funding	**(1,806)**	**(797)**	**(737)**	**(1,066)**	**1,524**
Unfunded plans					
– Defined benefit obligation	(3,249)	(3,080)	(3,486)	(3,078)	(3,344)
Increase (decrease) in funding status arising from experience adjustments					
– Fair value of plan assets	(474)	249	691	(2,787)	40
– Defined benefit obligation	1	218	(33)	(126)	(235)
Increase (decrease) in funding status arising from changes in actuarial assumptions					
– Fair value of plan assets	–	–	–	–	–
– Defined benefit obligation	(732)	(802)	(760)	115	1,295

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

	2011	2010
Employer contributions, net of reimbursements – funded plans	(293)	(196)
Benefits paid – unfunded plans	(137)	(138)
Total cash inflow (outflow)	**(430)**	**(334)**

Based on the most recent actuarial valuations, the Group expects that employer contributions for funded plans in 2012 will be approximately 302 million Swiss francs, which includes an estimated 71 million Swiss francs of additional contributions. Benefits paid for unfunded plans are estimated to be approximately 118 million Swiss francs.

Amounts recorded in other comprehensive income

The actuarial gains and losses recognised in the statement of comprehensive income were losses of 1,184 million Swiss francs (2010: losses of 344 million Swiss francs), pre-tax. The total amount at 31 December 2011 was an accumulated loss of 3,030 million Swiss francs (2010: accumulated loss of 1,846 million Swiss francs).

In addition 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 the cumulative unrecognised past service costs. Adjustments arising from this limit on asset recognition are recorded directly in other comprehensive income. In 2011 this adjustment was a decrease of 6 million Swiss francs (2010: decrease of 2 million Swiss francs).

10. Employee stock options and other equity compensation plans

The Group operates several equity compensation plans, including separate plans at Chugai. Effective 1 January 2005 the Group adopted IFRS 2 'Share-based Payment'. Amongst other matters, the standard requires that the fair value of all equity compensation plan awards granted to employees be estimated at grant date and recorded as an expense over the vesting period. The expense is charged against the appropriate income statement heading.

Expenses for equity compensation plans in millions of CHF

	2011	2010
Cost of sales	56	34
Marketing and distribution	79	58
Research and development	106	76
General and administration	130	124
Total operating expenses	**371**	**292**
Share option plans		
Roche Option Plan	6	6
Chugai Stock Acquisition Rights	2	2
Total share option plans	**8**	**8**
Other equity compensation plans		
Bonus Stock Awards	5	–
Roche Connect	13	14
Roche Stock-settled Stock Appreciation Rights	231	193
Roche Restricted Stock Unit Plan	95	72
Chugai Retirement Stock Acquisition Rights	1	1
Roche Performance Share Plan	17	14
Roche Stock Appreciation Rights	1	(10)
Total other equity compensation plans	**363**	**284**
Total operating expenses	**371**	**292**
of which		
– Equity-settled	370	302
– Cash-settled	1	(10)

Cash inflow (outflow) from equity compensation plans in millions of CHF

	2011	2010
Equity-settled equity compensation plans		
Roche Option Plan exercises	24	33
Chugai Stock Acquisition Rights exercises	–	–
Roche Connect costs	(13)	(14)
Total equity-settled equity compensation plans	**11**	**19**
Cash outflow from transactions in own equity instruments	(589)	(792)
Total cash inflow (outflow) from equity-settled equity compensation plans, net of transactions in own equity instruments	**(578)**	**(773)**
Cash-settled plans (included as part of movements in net working capital)		
Roche Stock Appreciation Rights	(7)	(19)

The net cash outflow from transactions in own equity instruments arises from sales and purchases of non-voting equity securities *(Genussscheine)* and derivative instruments thereon which are held for the Group's potential conversion obligations that may arise from the Group's equity-settled equity compensation plans. These derivative instruments mainly consist of call options that are exercisable at any time up to their maturity (see Note 27).

Roche Long-Term. During 2005 the Group implemented a new global long-term incentive programme which is available to certain directors, management and employees selected at the discretion of the Group. The programme consists of Stock-settled Stock Appreciation Rights ('S-SARs'), with the Group having the alternative of granting awards under the existing Roche Option Plan. In 2009, following the integration of Genentech, the Group also established a Restricted Stock Unit ('RSU') plan. The first awards of this plan were made in September 2009 to employees at Genentech. The S-SARs are issued in accordance with the Roche S-SAR Plan (the Regulations of 1 January 2005 including amendments effective as of 1 January 2007 and the addenda, including the Roche S-SAR Plan's 2009 Addendum United States as of 1 September 2009). The Remuneration Committee determines the number of non-voting equity securities *(Genussscheine)* that will be available under the plan each year. The above regulations collectively provide that 60 million non-voting equity securities *(Genussscheine)* will be available for issuance under the Roche S-SAR Plan over a ten-year period. The RSUs are issued in accordance with the Roche Restricted Stock Unit Plan (the Regulations effective 1 September 2009), under which 10 million non-voting equity securities *(Genussscheine)* will be available for issuance over a ten-year period. Further details of both plans are given in the relevant sections below.

Share option plans

Roche Option Plan. Awards under this plan give employees the right to purchase non-voting equity securities *(Genussscheine)* at an exercise price specified at the grant date. The options, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years, subject to continued employment. The Group covers such obligations by purchasing non-voting equity securities or derivatives thereon (see Note 27). With the introduction of Roche Long-Term in 2005, the number of options granted under the Roche Option Plan was significantly reduced, as most eligible employees now receive Roche Stock-settled Stock Appreciation Rights instead.

Roche Option Plan – movement in number of options outstanding

	Number of options (thousands)	2011 Weighted average exercise price (CHF)	Number of options (thousands)	2010 Weighted average exercise price (CHF)
Outstanding at 1 January	1,437	173.29	1,457	162.92
Granted	536	140.10	344	171.92
Forfeited	(105)	174.18	(77)	189.21
Exercised	(184)	128.33	(283)	115.25
Expired	(8)	129.50	(4)	77.80
Outstanding at 31 December	**1,676**	**167.77**	**1,437**	**173.29**
– of which exercisable	840	186.38	770	178.22

Roche Option Plan – terms of options outstanding as at 31 December 2011

Year of grant	Number outstanding (thousands)	Weighted average years remaining contractual life	Options outstanding Weighted average exercise price (CHF)	Number exercisable (thousands)	Options exercisable Weighted average exercise price (CHF)
2005	14	0.18	124.25	14	124.25
2006	84	1.17	195.28	84	195.28
2007	148	2.18	229.70	148	229.70
2008	291	3.10	194.85	291	194.85
2009	307	4.20	149.96	199	150.08
2010	310	5.25	171.71	104	171.73
2011	522	6.17	139.99	–	–
Total	**1,676**	**4.45**	**167.77**	**840**	**186.38**

Chugai Stock Acquisition Rights. During 2003 Chugai adopted a Stock Acquisition Rights programme. The programme allows for the granting of rights to employees and directors of Chugai. Each right entitles the holder to purchase 100 Chugai shares at a specified exercise price. The rights, which are non-tradable equity-settled awards, have a ten-year duration and vest after two years.

Chugai Stock Acquisition Rights – movement in number of rights outstanding

	Number of rights	2011 Weighted average exercise price (JPY)	Number of rights	2010 Weighted average exercise price (JPY)
Outstanding at 1 January	18,885	204,785	15,845	208,333
Granted	3,250	139,700	3,240	188,100
Forfeited	–	–	(200)	215,540
Exercised	–	–	–	–
Expired	–	–	–	–
Outstanding at 31 December	**22,135**	**195,229**	**18,885**	**204,785**
– of which exercisable	15,645	208,241	12,365	218,491

Chugai Stock Acquisition Rights – terms of rights outstanding at 31 December 2011

Year of grant	Number outstanding	Weighted average years remaining contractual life	Rights outstanding Weighted average exercise price (JPY)	Number exercisable	Rights exercisable Weighted average exercise price (JPY)
2003	1,064	1.50	145,400	1,064	145,400
2004	2,069	2.25	167,500	2,069	167,500
2005	2,452	3.25	164,900	2,452	164,900
2006	3,330	4.25	224,500	3,330	224,500
2007	3,450	5.25	303,900	3,450	303,900
2008 – no awards	–	–	–	–	–
2009	3,280	7.25	169,600	3,280	169,600
2010	3,240	8.33	188,100	–	–
2011	3,250	9.42	139,700	–	–
Total	**22,135**	**5.78**	**195,229**	**15,645**	**208,241**

Issues of share options in 2011. Issues of share options in 2011, including the methodology used to calculate fair value and the main inputs to the valuation models, are described below.

Issues of share option plans in 2011

	Roche Option Plan	Chugai Stock Acquisition Rights
Number of options granted	535,797	3,250
Underlying equity	Roche non-voting equity securities	Chugai shares in blocks of 100
Currency	Swiss francs	Japanese yen
Vesting period	Progressively over 3 years	After 2 years
Contractual life	7 years	10 years
Weighted average fair value of options issued	11.76	356
Option pricing model used	Binomial	Binomial
Inputs to option pricing model		
– Share price at grant date	140.10	130,700
– Exercise price	140.10	139,700
– Expected volatility	23.70%	32.74%
– Expected dividend yield	8.68%	3.06%
– Early exercise factor	1.176	n/a
– Expected exit rate	9.50%	0%

Volatility for Roche and Chugai options was determined primarily by reference to historically observed prices of the underlying equity. Risk-free interest rates are derived from zero coupon swap rates at the grant date taken from Datastream. The early exercise factor describes the ratio between the expected market price at the exercise date and the exercise price at which early exercises can be expected, based on historically observed behaviour.

Exercise of share options in 2011. The weighted average share price of Roche non-voting equity securities *(Genussscheine)* at the date of exercise of Roche Option Plan options was 143.43 Swiss francs. No share options with Chugai shares as underlying equity were exercised during the year.

Other equity compensation plans

Bonus Stock Awards. In 2011 50% of the bonus for members of the Corporate Executive Committee was awarded in the form of immediately vesting non-voting equity securities *(Genussscheine)*. A total of 32,342 awards were issued with a total fair value of 5 million Swiss francs. The fair value of the awards was calculated on the basis of the market value of Roche non-voting equity securities at the grant date.

Roche Connect. This programme enables all employees worldwide, except for those in the United States and certain other countries, to make regular deductions from their salaries to purchase non-voting equity securities *(Genussscheine)*. It is administered by independent third parties. The Group contributes to the programme, which allows the employees to purchase non-voting equity securities at a discount (usually 20%). The administrator purchases the necessary non-voting equity securities directly from the market. At 31 December 2011 the administrator held 2.2 million non-voting equity securities (2010: 1.9 million). The programme has been operational since 1 October 2002. During the year the cost of the plan was 13 million Swiss francs (2010: 14 million Swiss francs), which was reported within the relevant expenditure line by function.

Roche Stock-settled Stock Appreciation Rights. With the introduction of Roche Long-Term in 2005, the Group offers Stock-settled Stock Appreciation Rights (S-SARs) to certain directors, management and employees selected at the discretion of the Group. The S-SARs give employees the right to receive non-voting equity securities *(Genussscheine)* reflecting the value of any appreciation in the market price of the non-voting equity securities between the grant date and the exercise date. The rights, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years, subject to continued employment. The Group covers such obligations by purchasing non-voting equity securities, or derivatives thereon (see Note 27).

Roche S-SARs – movement in number of rights outstanding

	2011 Number of rights (thousands)	2011 Weighted average exercise price (CHF)	2010 Number of rights (thousands)	2010 Weighted average exercise price (CHF)
Outstanding at 1 January	38,833	165.73	26,185	173.12
Granted	18,266	140.20	16,064	154.56
Forfeited	(4,239)	162.12	(2,439)	181.85
Exercised	(1,816)	132.29	(977)	139.58
Expired	–	–	–	–
Outstanding at 31 December	**51,044**	**158.09**	**38,833**	**165.73**
– of which exercisable	20,733	174.92	13,041	182.01

Roche S-SARs – terms of rights outstanding at 31 December 2011

Year of grant	Number outstanding (thousands)	Weighted average years remaining contractual life	Rights outstanding Weighted average exercise price (CHF)	Number exercisable (thousands)	Rights exercisable Weighted average exercise price (CHF)
2005	209	0.20	125.74	209	125.74
2006	1,473	1.17	195.15	1,473	195.15
2007	2,169	2.17	229.39	2,169	229.39
2008	4,771	3.10	194.43	4,771	194.43
2009	10,938	4.49	156.70	7,194	156.91
2010	14,346	5.60	154.30	4,782	154.73
2011	17,138	6.18	140.20	135	140.10
Total	**51,044**	**5.03**	**158.09**	**20,733**	**174.92**

The weighted average fair value of the rights granted in 2011 was calculated using a binomial model. The inputs to the model were consistent with those used for the Roche Option Plan 2011 awards given previously, except that the expected volatility was 23.72%. The resulting weighted average fair value per right is 11.78 Swiss francs giving a total fair value of 215 million Swiss francs which is charged over the vesting period of three years.

Roche Restricted Stock Unit Plan. For the first time in September 2009 the Group issued Restricted Stock Units (RSUs) awards to certain directors, management and employees selected at the discretion of the Group. The RSUs, which are non-tradable, represent the right to receive non-voting equity securities *(Genussscheine)* which vest only after a three-year period. The weighted average fair value of the awards granted in 2011 was 119.65 Swiss francs calculated on the basis of the market value of Roche non-voting equity securities at the date of issue, discounted to take into account that the awards would not accrue for any dividends during the vesting period.

Roche RSUs – movement in number of awards outstanding

	2011 Number of awards (thousands)	2010 Number of awards (thousands)
Outstanding at 1 January	2,495	1,247
Granted	16	1,359
Forfeited	(265)	(107)
Transferred to participants	(19)	(4)
Outstanding at 31 December	**2,227**	**2,495**
– of which exercisable	–	5

Chugai Retirement Stock Acquisition Rights. For the first time in 2009 Chugai issued Stock Acquisition Rights in lieu of the Retirement Gratuities System for Directors which was abolished. The 888 rights issued in 2011 (2010: 716) have a thirty-year duration and vest upon the holder's retirement as a director of Chugai. Each right entitles the holder to purchase 100 Chugai shares at an exercise price of 100 Japanese yen. The total fair value of rights issued was equivalent to 1 million Swiss francs (2010: 1 million Swiss francs), which was calculated using a binomial model with inputs consistent with those used for the Chugai Stock Appreciation Rights given previously.

Roche Performance Share Plan. The Group offers future non-voting equity security awards (or, at the discretion of the Board of Directors, their cash equivalent) to certain directors and key senior managers. The programme was established at the beginning of 2002 and currently operates in annual three-year cycles. The terms of the currently outstanding awards are set out in the table below. The amount of non-voting equity securities allocated will depend upon the individual's salary level, the achievement of performance targets linked to the Group's Total Shareholder Return (shares and non-voting equity securities combined) relative to the Group's peers during the three-year period from the date of the grant, and the discretion of the Board of Directors. These are non-tradable equity-settled awards. Each award will result in between zero and two non-voting equity securities, depending upon the achievement of the performance targets.

Roche Performance Share Plan – terms of outstanding awards at 31 December 2011

	2009–2011	2010–2012	2011–2013
Number of awards outstanding (thousands)	92	97	148
Vesting period	3 years	3 years	3 years
Allocated to recipients in	Feb. 2012	Feb. 2013	Feb. 2014
Fair value per unit at grant (CHF)	156.06	173.39	124.17
Total fair value at grant (CHF millions)	**18**	**19**	**19**

The weighted average fair value of the 153,539 awards granted in 2011 was calculated using a Monte Carlo simulation. The input parameters to the model were the covariance matrix between Roche and the other individual companies of the peer group based on a three-year history and a risk-free rate of 0.7390%. The valuation also takes into account the defined rank and performance structure which determines the payout of the plan.

Roche Stock Appreciation Rights. Some employees of certain North American subsidiaries of the Group received Stock Appreciation Rights (SARs) as part of their compensation. The SARs, which were non-tradable cash-settled awards, could be exercised after a vesting period of between one and three years for a cash payment, based upon the amount by which the market price of the Group's American Depositary Receipts (ADRs) at the point of exercise exceeds the strike price (grant price at issuance). Following the implementation of Roche Long-Term (see above), the Group has not awarded any further cash-settled SARs and no awards have been made since 2004.

Roche Stock Appreciation Rights in millions of CHF

	2011	2010
Liability at 31 December	–	6
Intrinsic value of vested rights at 31 December	–	6

There were no outstanding awards at the end of 2011.

11. Property, plant and equipment

Property, plant and equipment: movements in carrying value of assets in millions of CHF

	Land	Buildings and land improvements	Machinery and equipment	Construction in progress	Total
At 1 January 2010					
Cost	1,054	12,022	16,467	2,377	31,920
Accumulated depreciation and impairment	–	(4,512)	(9,610)	(101)	(14,223)
Net book value	**1,054**	**7,510**	**6,857**	**2,276**	**17,697**
Year ended 31 December 2010					
At 1 January 2010	1,054	7,510	6,857	2,276	17,697
Additions	–	58	1,034	1,571	2,663
Disposals	(8)	(8)	(22)	(4)	(42)
Business combinations [6]	–	–	2	–	2
Transfers	(2)	835	1,016	(1,849)	–
Depreciation charge	–	(489)	(1,444)	–	(1,933)
Impairment charge	–	(18)	(61)	(59)	(138)
Currency translation effects	(74)	(592)	(704)	(150)	(1,520)
At 31 December 2010	**970**	**7,296**	**6,678**	**1,785**	**16,729**
Cost	970	11,853	16,257	1,908	30,988
Accumulated depreciation and impairment	–	(4,557)	(9,579)	(123)	(14,259)
Net book value	**970**	**7,296**	**6,678**	**1,785**	**16,729**
Year ended 31 December 2011					
At 1 January 2011	970	7,296	6,678	1,785	16,729
Additions	4	95	858	1,049	2,006
Disposals	(61)	(183)	(66)	(13)	(323)
Business combinations [6]	–	–	3	–	3
Divestment of subsidiaries [33]	–	(1)	(6)	(2)	(9)
Transfers	–	744	764	(1,508)	–
Reclassification to assets-held-for-sale [7]	–	(13)	(63)	(23)	(99)
Depreciation charge	–	(461)	(1,387)	–	(1,848)
Impairment charge	–	(61)	(29)	(6)	(96)
Other	–	–	(124)	–	(124)
Currency translation effects	8	(4)	(34)	(8)	(38)
At 31 December 2011	**921**	**7,412**	**6,594**	**1,274**	**16,201**
Cost	921	12,166	16,631	1,344	31,062
Accumulated depreciation and impairment	–	(4,754)	(10,037)	(70)	(14,861)
Net book value	**921**	**7,412**	**6,594**	**1,274**	**16,201**

Impairment charges arise from changes in the estimates of the future cash flows expected to result from the use of the asset and its eventual disposal. Factors such as changes in the planned use of buildings, machinery or equipment, or closure of facilities, the presence or absence of competition and technical obsolescence could result in shortened useful lives or impairment. Impairment charges of 25 million Swiss francs (2010: 61 million Swiss francs) are reported as part of 'Cost of sales' and 71 million Swiss francs (2010: 71 million Swiss francs) in 'Research and development'. In 2011 there were no impairment charges reported within 'General and administration' (2010: 6 million Swiss francs).

In 2011 income of 24 million Swiss francs was received from insurance companies in respect of impairments to property, plant and equipment (2010: none). This was mostly in respect of damage arising from the East Japan Earthquake (see Note 3).

In 2011 no borrowing costs were capitalised as property, plant and equipment (2010: 6 million Swiss francs using a rate of 4.79%).

Leasing arrangements where the Group is the lessee

Finance leases. As at 31 December 2011 the capitalised cost of property, plant and equipment under finance leases was 314 million Swiss francs (2010: 371 million Swiss francs) and the net book value of these assets was 181 million Swiss francs (2010: 201 million Swiss francs). The carrying value of the leasing obligation was 225 million Swiss francs (2010: 238 million Swiss francs), which is reported as part of Debt (see Note 26).

Finance leases: future minimum lease payments under non-cancellable leases in millions of CHF

	Future minimum lease payments		Present value of future minimum lease payments	
	2011	2010	2011	2010
Within one year	31	29	17	14
Between one and five years	131	126	89	78
More than five years	131	168	119	146
Total	**293**	**323**	**225**	**238**
Future finance charges	–	–	68	85
Total future minimum lease payments (undiscounted)	**293**	**323**	**293**	**323**

Operating leases. Group companies are party to a number of operating leases, mainly for plant and machinery, including motor vehicles, and for certain short-term property rentals. The arrangements do not impose any significant restrictions on the Group. Total operating lease rental expense was 395 million Swiss francs (2010: 428 million Swiss francs).

Operating leases: future minimum lease payments under non-cancellable leases in millions of CHF

	2011	2010
Within one year	206	223
Between one and five years	376	404
More than five years	178	220
Total minimum payments	**760**	**847**

Leasing arrangements where the Group is the lessor

Finance leases. Certain assets, mainly Diagnostics instruments, are leased to third parties through finance lease arrangements. Such assets are reported as receivables at an amount equal to the net investment in the lease. Lease income from finance leases is recognised over the term of the lease based on the effective interest rate method.

Finance leases: future minimum lease payments under non-cancellable leases in millions of CHF

	Gross investment in lease 2011	2010	Present value of future minimum lease payments 2011	2010
Within one year	33	27	30	24
Between one and five years	86	66	81	62
More than five years	–	1	–	1
Total	**119**	**94**	**111**	**87**
Unearned finance income	(8)	(6)	n/a	n/a
Unguaranteed residual value	n/a	n/a	–	1
Net investment in lease	**111**	**88**	**111**	**88**

The accumulated allowance for uncollectible minimum lease payments was 2 million Swiss francs (2010: 1 million Swiss francs). There were no contingent rents recognised in income.

Operating leases. Certain assets, mainly some Diagnostics instruments, are leased to third parties through operating lease arrangements. Such assets are reported within property, plant and equipment. Lease income from operating leases is recognised over the lease term on a straight-line basis.

At 31 December 2011, machinery and equipment with an original cost of 3,040 million Swiss francs (2010: 2,792 million Swiss francs) and a net book value of 1,274 million Swiss francs (2010: 1,182 million Swiss francs) was being leased to third parties. There was no contingent rent recognised as income.

Operating leases: future minimum lease payments under non-cancellable leases in millions of CHF

	2011	2010
Within one year	95	107
Between one and five years	103	190
More than five years	–	–
Total minimum payments	**198**	**297**

Capital commitments

The Group has non-cancellable capital commitments for the purchase or construction of property, plant and equipment totalling 0.6 billion Swiss francs (2010: 0.6 billion Swiss francs).

12. Goodwill

Goodwill: movements in carrying value of assets in millions of CHF

	2011	2010
At 1 January	7,722	8,261
Business combinations [6]	194	264
Divestment of subsidiaries [33]	(72)	–
Impairment charge	–	–
Currency translation effects	(1)	(803)
At 31 December	**7,843**	**7,722**
Allocated to the following cash-generating units		
Pharmaceuticals Division		
– Roche Pharmaceuticals	2,099	2,078
– Chugai	134	127
Total Pharmaceuticals Division	**2,233**	**2,205**
Diagnostics Division		
– Diabetes Care	833	837
– Professional Diagnostics	1,581	1,548
– Molecular Diagnostics	–	–
– Applied Science	223	222
– Tissue Diagnostics	822	744
– Strategic goodwill (held at divisional level and not allocated to business areas)	2,151	2,166
Total Diagnostics Division	**5,610**	**5,517**

There are no accumulated impairment losses in goodwill. The goodwill arising from investments in associates is classified as part of the investments in associates (see Note 14).

Goodwill impairment testing

Pharmaceuticals Division. The division's sub-divisions are the cash-generating units used for the testing of goodwill. For Chugai, the recoverable amount is based on fair value less costs to sell, determined with reference to the publicly quoted share prices of Chugai shares. For Roche Pharmaceuticals, the recoverable amount used in the impairment testing is based on value in use. The cash flow projections used are based on the most recent business plans approved by management. These assume no significant changes in the organisation of the division and include management's latest estimates on sales volume and pricing, and production and other operating costs. These reflect past experience and are projected over five years. These valuations also include a terminal value beyond these years, assuming no further growth. The discount rate used is based on an after-tax rate of 6.57%, which is derived from a capital asset pricing model using data from Swiss capital markets, including Swiss Federal Government twenty-year bonds and the Swiss Market Index. A weighted average tax rate of 25.23% is used in the calculations and the corresponding pre-tax discount rate is 8.8%. Management believes that any reasonably possible change in any of the key assumptions would not cause the carrying value of goodwill to exceed the recoverable amount.

Diagnostics Division. | The division's business areas are the cash-generating units used for the testing of goodwill. The goodwill arising from the Corange/Boehringer Mannheim acquisition and part of the goodwill from the Ventana acquisition is recorded and monitored at a divisional level as it relates to the strategic development of the whole division and cannot be meaningfully allocated to the division's business areas. Therefore the cash-generating unit for this goodwill is the entire division. The recoverable amount used in the impairment testing is based on value in use. The cash flow projections used are based on the most recent business plans approved by management. These assume no significant changes in the organisation of the division and include management's latest estimates on sales volume and pricing, and production and other operating costs. These reflect past experience and are projected over five years. The estimates for the Tissue Diagnostics business area are projected over ten years, which management believes reflects the long-term nature of this business. These valuations also include a terminal value beyond these years, assuming no further growth. The discount rate used is based on an after-tax rate of 6.57%, which is derived from a capital asset pricing model using data from Swiss capital markets, including Swiss Federal Government twenty-year bonds and the Swiss Market Index. A weighted average tax rate of 18.80% is used in the calculations and the corresponding pre-tax discount rate is 8.1%. Management believes that any reasonably possible change in any of the key assumptions would not cause the carrying value of goodwill to exceed the recoverable amount.

13. Intangible assets

Intangible assets: movements in carrying value of assets in millions of CHF

	Product intangibles: in use	Product intangibles: not available for use	Marketing intangibles: in use	Technology intangibles: in use	Total
At 1 January 2010					
Cost	13,759	2,750	42	790	17,341
Accumulated amortisation and impairment	(10,231)	(446)	(21)	(638)	(11,336)
Net book value	**3,528**	**2,304**	**21**	**152**	**6,005**
Year ended 31 December 2010					
At 1 January 2010	3,528	2,304	21	152	6,005
Business combinations [6]	284	248	–	4	536
Additions	43	280	–	15	338
Disposals	–	–	–	–	–
Transfers	63	(28)	–	(35)	–
Amortisation charge	(592)	–	(4)	(23)	(619)
Impairment charge	(33)	(574)	–	(60)	(667)
Currency translation effects	(319)	(139)	(3)	1	(460)
At 31 December 2010	**2,974**	**2,091**	**14**	**54**	**5,133**
Cost	12,819	3,063	29	698	16,609
Accumulated amortisation and impairment	(9,845)	(972)	(15)	(644)	(11,476)
Net book value	**2,974**	**2,091**	**14**	**54**	**5,133**
Allocation by operating segment					
– Roche Pharmaceuticals	546	1,548	–	36	2,130
– Chugai	300	–	–	–	300
– Diagnostics	2,128	543	14	18	2,703
Total Group	**2,974**	**2,091**	**14**	**54**	**5,133**

Intangible assets: movements in carrying value of assets *(continued)* in millions of CHF

	Product intangibles: in use	Product intangibles: not available for use	Marketing intangibles: in use	Technology intangibles: in use	Total
Year ended 31 December 2011					
At 1 January 2011	2,974	2,091	14	54	5,133
Business combinations [6]	243	158	4	–	405
Additions	43	203	–	–	246
Disposals	–	–	–	–	–
Transfers	90	(90)	–	–	–
Amortisation charge	(505)	–	(5)	(10)	(520)
Impairment charge	(86)	(52)	–	–	(138)
Currency translation effects	(14)	16	(1)	(1)	–
At 31 December 2011	**2,745**	**2,326**	**12**	**43**	**5,126**
Cost	13,185	2,748	32	612	16,577
Accumulated amortisation and impairment	(10,440)	(422)	(20)	(569)	(11,451)
Net book value	**2,745**	**2,326**	**12**	**43**	**5,126**
Allocation by operating segment					
– Roche Pharmaceuticals	525	1,817	–	27	2,369
– Chugai	249	–	–	–	249
– Diagnostics	1,971	509	12	16	2,508
Total Group	**2,745**	**2,326**	**12**	**43**	**5,126**

Significant intangible assets as at 31 December 2011 in millions of CHF

	Operating segment	Net book value	Remaining amortisation period
Product intangibles in use			
Tanox acquisition	Roche Pharmaceuticals	309	8 years
Corange/Boehringer Mannheim acquisition	Diagnostics	724	6 years
Ventana acquisition	Diagnostics	424	6 years
Product intangibles not available for use			
InterMune alliance	Roche Pharmaceuticals	296	n/a
Ventana acquisition	Diagnostics	485	n/a

Classification of amortisation and impairment expenses in millions of CHF

	2011 Amortisation	2011 Impairment	2010 Amortisation	2010 Impairment
Cost of sales				
– Pharmaceuticals	137	32	156	–
– Diagnostics	361	54	436	33
Marketing and distribution				
– Diagnostics	5	–	4	–
Research and development				
– Pharmaceuticals	15	47	19	634
– Diagnostics	2	5	4	–
Total	**520**	**138**	**619**	**667**

Internally generated intangible assets

The Group currently has no internally generated intangible assets from development as the criteria for the recognition as an asset are not met.

Intangible assets with indefinite useful lives

The Group currently has no intangible assets with indefinite useful lives.

Impairment of intangible assets

Impairment charges arise from changes in the estimates of the future cash flows expected to result from the use of the asset and its eventual disposal. Factors such as the presence or absence of competition, technical obsolescence or lower than anticipated sales for products with capitalised rights could result in shortened useful lives or impairment.

2011. In 2011 the Roche Pharmaceuticals operating segment recorded an impairment charge of 79 million Swiss francs and the Diagnostics operating segment recorded an impairment charge of 59 million Swiss francs.

In the Pharmaceuticals operating segment an impairment charge of 32 million Swiss francs was recorded related to a decision to stop the development of a project acquired in a business combination that had been out-licensed to an alliance partner. The asset concerned, which had been partly amortised, was written down to its recoverable value of 29 million Swiss francs, based on a value in use calculation using an after-tax discount rate of 6.57%. A further charge of 47 million Swiss francs was recorded, resulting from portfolio prioritisation decisions on projects acquired separately or as part of a business combination. The assets concerned, which were not yet being amortised, were fully written down by these charges.

In the Diagnostics operating segment, an impairment charge of 59 million Swiss francs was recorded mainly in respect of intangible assets in use. This followed the regular updating of the division's business plans and technology assessments in the second half of 2011. The assets concerned were written down to their recoverable amount of 14 million Swiss francs, based on a value in use calculation using an after-tax discount rate of 6.57%.

2010. In 2010 the Roche Pharmaceuticals operating segment recorded an impairment charge of 634 million Swiss francs and the Diagnostics operating segment recorded an impairment charge of 33 million Swiss francs.

Of the amount recorded in the Roche Pharmaceuticals operating segment, an impairment charge of 424 million Swiss francs was recorded as part of the Operational Excellence programme (see Note 7). As part of the programme the division carried out a comprehensive portfolio review and decided to discontinue certain activities in research and early development. In addition certain product development activities are being discontinued or transferred to other Roche sites or to third parties. As a result of these decisions intangible assets with a carrying value of 424 million Swiss francs were fully written down during 2010.

Apart from the Operational Excellence programme, an impairment charge of 179 million Swiss francs was also recorded in the Pharmaceuticals Division with respect to product intangibles not available for use and follows primarily from recent clinical data and portfolio prioritisation decisions relating to certain projects either with alliance partners or acquired in business combinations. The assets concerned, which were not yet being amortised, were fully written down by these charges. A further charge of 47 million Swiss francs was recorded, resulting from a portfolio prioritisation decision on a project acquired as part of a previous business combination. The asset concerned, which was not yet being amortised, was written down to its recoverable value of 95 million Swiss francs, based on a value in use calculation using an after-tax discount rate of 7.31%. A reversal of previously recorded impairment loss of 16 million Swiss francs was recorded, which followed from the latest clinical data assessment of the project concerned.

In the Diagnostics operating segment, an impairment charge of 33 million Swiss francs was recorded. This was in respect of intangible assets in use and followed the regular updating of the division's business plans and technology assessments in the second half of 2010. The assets concerned were written down to their recoverable amount of 23 million Swiss francs, based on a value in use calculation using an after-tax discount rate of 7.31%.

Intangible assets not available for use. These mostly represent in-process research and development assets acquired either through in-licensing arrangements, business combinations or separate purchases. As at 31 December 2011 the carrying value of such assets in the Pharmaceuticals Division is 1,817 million Swiss francs. Of this amount approximately 29% represents projects that have potential decision points within the next twelve months which in certain circumstances could lead to impairment. Due to the inherent uncertainties in the research and development processes, intangible assets not available for use are particularly at risk of impairment if the project in question does not result in a commercialised product.

Potential commitments from alliance collaborations

The Group is party to in-licensing and similar arrangements with its alliance partners. These arrangements may require the Group to make certain milestone or other similar payments dependent upon the achievement of agreed objectives or performance targets as defined in the collaboration agreements.

The Group's current estimate of future third-party commitments for such payments is set out in the table below. These figures are undiscounted and are not risk adjusted, meaning that they include all such potential payments that can arise assuming all projects currently in development are successful. The timing is based on the Group's current best estimate. These figures do not include any potential commitments within the Group, such as may arise between the Roche and Chugai businesses.

Potential future third-party collaboration payments as at 31 December 2011 in millions of CHF

	Pharmaceuticals	Diagnostics	Group
Within one year	125	20	145
Between one and two years	265	21	286
Between two and three years	264	4	268
Total	**654**	**45**	**699**

14. Associates

The Group's investments in associates are accounted for using the equity method. The goodwill arising from investments in associates is classified as part of the investments in associates.

Investments in associates in millions of CHF

	Share of net income		Carrying value		
	2011	2010	2011	2010	2009
Total investments in associates	**12**	**(3)**	**24**	**13**	**16**

The Group has no significant investments in associates and there were no material transactions between the Group and its associates. Additional information about associates is given in Note 33.

15. Financial and other long-term assets

Financial and other long-term assets in millions of CHF

	2011	2010	2009
Available-for-sale investments	201	239	315
Held-to-maturity investments	–	–	5
Loans receivable	6	9	18
Long-term trade receivables	35	75	45
Restricted cash	37	41	41
Other	81	64	57
Total financial long-term assets	**360**	**428**	**481**
Long-term employee benefits	240	230	226
Other	220	226	226
Total other long-term assets	**460**	**456**	**452**

Financial long-term assets are held for strategic purposes and are classified as non-current. The available-for-sale investments are mainly equity investments. These are primarily investments in private biotechnology companies, which are kept as part of the Group's strategic alliance efforts. Some unquoted equity investments classified as available-for-sale are measured at cost, as their fair value cannot be measured reliably. The carrying value of equity investments held at cost is 53 million Swiss francs (2010: 39 million Swiss francs, 2009: 34 million Swiss francs). Loans receivable comprise all loans to third parties with a term of over one year.

16. Inventories

Inventories in millions of CHF

	2011	2010	2009
Raw materials and supplies	817	793	814
Work in process	155	169	262
Intermediates	3,101	3,290	3,766
Finished goods	1,348	1,174	1,244
Less: provision for slow-moving and obsolete inventory	(361)	(454)	(438)
Total inventories	**5,060**	**4,972**	**5,648**

In 2011 expenses relating to inventories expensed through cost of sales totalled 8,481 million Swiss francs (2010: 8,951 million Swiss francs).

17. Accounts receivable

Accounts receivable in millions of CHF

	2011	2010	2009
Trade accounts receivable	10,270	9,700	10,540
Notes receivable	152	224	270
Other	30	24	24
Allowances for doubtful accounts	(431)	(376)	(273)
Charge-backs and other allowances	(222)	(169)	(100)
Total accounts receivable	**9,799**	**9,403**	**10,461**

At 31 December 2011 accounts receivable include amounts denominated in US dollars equivalent to 2.3 billion Swiss francs (2010: 2.0 billion Swiss francs, 2009: 2.3 billion Swiss francs) and amounts denominated in euros equivalent to 3.1 billion Swiss francs (2010: 3.2 billion Swiss francs, 2009: 3.9 billion Swiss francs).

Allowances for doubtful accounts receivable: movements in recognised liability in millions of CHF

	2011	2010
At 1 January	(376)	(273)
Additional allowances created	(253)	(198)
Unused amounts reversed	65	26
Utilised during the year	126	56
Currency translation effects	7	13
At 31 December	**(431)**	**(376)**

In 2011 expenses relating to bad debts expensed through marketing and distribution totalled 193 million Swiss francs (2010: 182 million Swiss francs). Significant concentrations within trade receivables of counterparty credit risk are described in Note 31.

In the second half of 2010 the Group accepted an offer made by the Greek government to settle 0.4 billion euros of trade receivables (nominal value) with zero coupon government bonds, redeemable between 2011 and 2013. The settlement terms implied a discount of 114 million euros, an average discount of 26%. Additional allowances for doubtful accounts totalling 138 million Swiss francs were made in 2010 in respect of this. The bonds were delivered in 2010 and 2011, and at this point the carrying value of the trade receivables, net of the accumulated allowances for doubtful accounts, was reclassified as available-for-sale marketable securities. Allowances utilised in this respect totalled 117 million Swiss francs.

Subsequently the Group has sold the vast majority of these bonds during 2011 and the total financial result on the trade receivables and zero coupon bonds in scope of the settlement was an expense of 2 million Swiss francs. This includes interest income, gains and losses on sale of bonds, and an impairment of the remaining position to market value at 31 December 2011.

18. Other current assets

Other current assets in millions of CHF

	2011	2010	2009
Accrued interest income	20	53	4
Derivative financial instruments [23]	274	485	1,756
Restricted cash	–	–	1
Other	699	612	669
Total financial current assets	**993**	**1,150**	**2,430**
Prepaid expenses	383	462	499
Other	488	556	648
Total non-financial current assets	**871**	**1,018**	**1,147**
Total other current assets	**1,864**	**2,168**	**3,577**

Derivative financial instrument assets are primarily related to hedges on the non-US dollar-denominated bonds and notes issued to finance the Genentech transaction. The decline compared to 31 December 2010 is mainly due to a strengthening of the US dollar compared to the euro during 2011.

19. Marketable securities

Marketable securities in millions of CHF

	2011	2010	2009
Financial assets at fair-value-through-profit-or-loss			
– Bonds and debentures	–	–	–
Total financial assets at fair-value-through-profit-or-loss	**–**	**–**	**–**
Held-to-maturity financial assets			
– Money market instruments and time accounts over three months	–	4	11
Total held-to-maturity financial assets	**–**	**4**	**11**
Available-for-sale financial assets			
– Shares	241	272	314
– Bonds and debentures	1,428	1,614	753
– Money market instruments and time accounts over three months	5,764	7,170	15,029
– Other investments	–	–	–
Total available-for-sale financial assets	**7,433**	**9,056**	**16,096**
Total marketable securities	**7,433**	**9,060**	**16,107**

Marketable securities are held for fund management purposes and are classified as current. They are primarily denominated in Swiss francs, US dollars and euros. Other investments held for strategic purposes are classified as non-current (see Note 15).

Shares. These consist primarily of readily saleable equity securities.

Bonds and debentures. The carrying values and contracted maturity of debt securities are shown below.

Bonds and debentures in millions of CHF

Contracted maturity	2011	2010	2009
Within one year	735	388	261
Between one and five years	693	1,109	339
More than five years	–	117	153
Total bonds and debentures	**1,428**	**1,614**	**753**

Money market instruments. These are contracted to mature within one year of 31 December 2011.

20. Cash and cash equivalents

Cash and cash equivalents in millions of CHF

	2011	2010	2009
Cash			
– Cash in hand and in current or call accounts	2,838	1,744	2,396
Cash equivalents			
– Time accounts with a maturity of three months or less	1,016	97	46
Total cash and cash equivalents	**3,854**	**1,841**	**2,442**

21. Accounts payable

Accounts payable in millions of CHF

	2011	2010	2009
Trade accounts payable	1,213	1,141	1,299
Other taxes payable	403	360	442
Dividends payable	2	2	15
Other accounts payable	435	565	544
Total accounts payable	**2,053**	**2,068**	**2,300**

22. Accrued and other current liabilities

Accrued liabilities and other current liabilities in millions of CHF

	2011	2010	2009
Deferred income	373	458	562
Accrued payroll and related items	1,804	1,753	2,026
Interest payable	887	1,028	1,138
Derivative financial instruments [23]	104	102	343
Other accrued liabilities	3,647	3,185	5,329
Total accrued and other current liabilities	**6,815**	**6,526**	**9,398**

23. Derivative financial instruments

The Group uses derivative financial instruments as part of its risk management activities. This is discussed in Note 31. Derivative financial instruments are carried at fair value. The methods used for determining fair value are described in Note 1.

Derivative financial instruments in millions of CHF

			Assets			Liabilities
	2011	2010	2009	2011	2010	2009
Foreign currency derivatives						
– Forward exchange contracts	87	129	25	(42)	(95)	(343)
– Cross-currency swaps	178	356	1,698	–	–	–
– Other	–	–	–	–	–	–
Interest rate derivatives						
– Swaps	9	–	11	–	–	–
– Other	–	–	2	–	–	–
Other derivatives	–	–	20	(62)	(7)	–
Total derivative financial instruments [18, 22]	**274**	**485**	**1,756**	**(104)**	**(102)**	**(343)**

Hedge accounting

The Group's accounting policy on hedge accounting, which is described in Note 1, requires that to qualify for hedge accounting the hedging relationship must meet several strict conditions on documentation, probability of occurrence, hedge effectiveness and reliability of measurement.

As described in Note 31, the Group has financial risk management policies for foreign exchange risk, interest rate risk, market risk, credit risk and liquidity risk. When deemed appropriate, certain of the above risks are managed by using derivatives. While many of these transactions can be considered as hedges in economic terms, if the required 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, which means that any derivatives are reported at fair value, with changes in fair value included in financial income.

The Group generally limits the use of hedge accounting to certain significant transactions. Consequently as at 31 December 2011 the Group has no fair value hedges, cash flow hedges or hedges of net investment in a foreign entity that meet the strict requirements to qualify for hedge accounting, apart from those described below.

Cash flow hedges

The Group has issued bonds and notes in 2009 to finance the Genentech transaction (see Note 26). On some of the bonds and notes which are denominated in euros and sterling, the Group has entered into cross-currency swaps to hedge foreign exchange and interest rate risk. These cash flow hedges qualify for hedge accounting. As at 31 December 2011 such instruments, which are designated and qualify for hedge accounting, are recorded as assets with a fair value of 178 million Swiss francs (2010: assets of 356 million Swiss francs). There was no ineffective portion.

The expected undiscounted cash flows from qualifying cash flow hedges, including interest payments during the duration of the derivative contract and final settlement on maturity, are shown in the table below. The decline in expected cash flows is due to a stronger Swiss franc against the euro, US dollar and pound sterling.

Expected cash flows of qualifying cash flow hedges in millions of CHF

	Total	0–3 months	4–6 months	7–12 months	1–2 years	2–3 years	3–4 years	4–5 years	Over 5 years
Year ended 31 December 2011									
Cash inflows	14,062	594	–	–	5,346	375	1,244	3,678	2,825
Cash outflows	(14,091)	(665)	–	–	(5,330)	(405)	(1,204)	(3,655)	(2,832)
Total	**(29)**	**(71)**	**–**	**–**	**16**	**(30)**	**40**	**23**	**(7)**
Year ended 31 December 2010									
Cash inflows	16,833	683	–	–	683	7,207	381	1,247	6,632
Cash outflows	(16,561)	(749)	–	–	(751)	(7,003)	(403)	(1,199)	(6,456)
Total	**272**	**(66)**	**–**	**–**	**(68)**	**204**	**(22)**	**48**	**176**

The undiscounted cash flows in the table above will affect profit and loss as shown below. These include interest payments during the duration of the derivative contract but do not include the final settlement on maturity. The decline in expected cash flows is due to a stronger Swiss franc against the euro, US dollar and pound sterling.

Expected cash flows of qualifying cash flow hedges with impact on profit and loss in millions of CHF

	Total	0–3 months	4–6 months	7–12 months	1–2 years	2–3 years	3–4 years	4–5 years	Over 5 years
Year ended 31 December 2011									
Cash inflows	2,959	594	–	–	595	375	375	327	693
Cash outflows	(3,228)	(665)	–	–	(662)	(405)	(405)	(357)	(734)
Total	**(269)**	**(71)**	**–**	**–**	**(67)**	**(30)**	**(30)**	**(30)**	**(41)**
Year ended 31 December 2010									
Cash inflows	3,851	683	–	–	683	683	381	381	1,040
Cash outflows	(4,138)	(749)	–	–	(751)	(747)	(403)	(403)	(1,085)
Total	**(287)**	**(66)**	**–**	**–**	**(68)**	**(64)**	**(22)**	**(22)**	**(45)**

The changes in the hedging reserve within equity are shown in Note 27.

Fair value hedges

During 2011 the Group entered into some interest rate swaps to hedge some of its fixed-term debt instruments. These instruments, which had been designated and qualified as fair value hedges, were recorded in the balance sheet at 31 December 2011 as assets with a fair value of 9 million Swiss francs. During 2011 a gain of 9 million Swiss francs was recorded on these interest rate swaps. As the fair value hedge had been highly effective since inception, the result of the interest rate swaps was largely offset by changes in the fair value of the hedged debt instruments.

During 2010 there were similar transactions, where the interest rate swaps expired in July 2010 when the underlying bond was redeemed. During 2010 a loss of 11 million Swiss francs was recorded on these interest rate swaps. As the fair value hedge had been highly effective since inception, the result of the interest rate swaps was largely offset by changes in the fair value of the hedged debt instruments.

The Group has equity investments in various biotechnology companies that are subject to a greater risk of market fluctuation than the stock market in general. To manage part of this exposure the Group has entered into forward contracts, which have been designated and qualify as fair value hedges. As at 31 December 2011 such instruments are recorded as liabilities with a fair value of 62 million Swiss francs (2010: liabilities of 7 million Swiss francs). During 2011 a loss of 55 million Swiss francs was recorded on these forward contracts (2010: loss of 27 million Swiss francs). The result of the forward contracts is offset by the changes in the fair value of the hedged equity investments.

The Group uses other derivatives, not designated in a qualifying hedge relationship, to manage its exposures to foreign currency, interest rate, equity market and credit risks. The instruments used may include interest rate swaps, cross-currency swaps, forwards contracts, options.

24. Provisions and contingent liabilities

Provisions: movements in recognised liabilities in millions of CHF

	Legal provisions	Environmental provisions	Restructuring provisions	Employee provisions	Other provisions	Total
Year ended 31 December 2010						
At 1 January 2010	549	247	532	278	712	2,318
Additional provisions created	444	42	897	118	430	1,931
Unused amounts reversed	(54)	(13)	(80)	(6)	(153)	(306)
Utilised during the year	(76)	(17)	(299)	(100)	(237)	(729)
Unwinding of discount [4]	5	12	2	1	–	20
Business combinations [6]						
– Acquired companies	–	–	–	–	–	–
– Contingent consideration	–	–	–	–	118	118
Currency translation effects	(87)	(10)	(82)	(38)	(55)	(272)
At 31 December 2010	**781**	**261**	**970**	**253**	**815**	**3,080**
Of which						
– Current portion	716	10	761	61	598	2,146
– Non-current portion	65	251	209	192	217	934
Total provisions	**781**	**261**	**970**	**253**	**815**	**3,080**
Year ended 31 December 2011						
At 1 January 2011	781	261	970	253	815	3,080
Additional provisions created	99	8	173	92	533	905
Unused amounts reversed	(35)	(1)	(77)	(8)	(244)	(365)
Utilised during the year	(99)	(9)	(480)	(57)	(303)	(948)
Unwinding of discount [4]	1	7	–	1	6	15
Business combinations [6]						
– Acquired companies	–	–	–	7	1	8
– Contingent consideration	–	–	–	–	82	82
– Contingent consideration utilisation	–	–	–	–	(15)	(15)
Divestment of subsidiaries [33]	–	(1)	(3)	–	–	(4)
Currency translation effects	(1)	–	(17)	1	(8)	(25)
At 31 December 2011	**746**	**265**	**566**	**289**	**867**	**2,733**
Of which						
– Current portion	655	11	376	88	612	1,742
– Non-current portion	91	254	190	201	255	991
Total provisions	**746**	**265**	**566**	**289**	**867**	**2,733**
Expected outflow of resources						
– Within one year	655	11	376	88	612	1,742
– Between one to two years	68	28	100	39	69	304
– Between two to three years	3	47	49	21	125	245
– More than three years	20	179	41	141	61	442
Total provisions	**746**	**265**	**566**	**289**	**867**	**2,733**

Legal provisions

Legal provisions consist of a number of separate legal matters, including claims arising from trade, in various Group companies. The majority of any cash outflows for these other matters are expected to occur within the next one to three years, although these are dependent on the development of the various litigations. Significant provisions are discounted by between 4% and 5% where the time value of money is material.

Environmental provisions

Provisions for environmental matters include various separate environmental issues in a number of countries. By their nature the amounts and timings of any outflows are difficult to predict. The estimated timings of these cash outflows are shown in the table above. Significant provisions are discounted by between 5% and 6% where the time value of money is material.

Restructuring provisions

These arise from planned programmes that materially change the scope of business undertaken by the Group or the manner in which business is conducted. Such provisions include only the costs necessarily entailed by the restructuring which are not associated with the recurring activities of the Group. The timings of these cash outflows are reasonably certain on a global basis and are shown in the table above. These provisions are not discounted as the time value of money is not material in these matters.

Employee provisions

These mostly relate to certain employee benefit obligations, such as sabbatical leave and long-service benefits. The timings of these cash outflows can be reasonably estimated based on past performance and are shown in the table above. Significant provisions are discounted by 6% where the time value of money is material.

Other provisions

Other provisions mostly relate to sales returns and various other provisions from Group companies that do not fit into the above categories. The timings of cash outflows are by their nature uncertain and the best estimates are shown in the table above. Significant provisions are discounted by between 2% and 7% where the time value of money is material.

Contingent liabilities

The operations and earnings of the Group continue, from time to time and in varying degrees, to be affected by political, legislative, fiscal and regulatory developments, including those relating to environmental protection, in the countries in which it operates. The industries in which the Group operates are also subject to other risks of various kinds. The nature and frequency of these developments and events, not all of which are covered by insurance, as well as their effect on future operations and earnings, are not predictable.

The Group has entered into strategic alliances with various companies in order to gain access to potential new products or to utilise other companies to help develop the Group's own potential new products. Potential future payments may become due to certain collaboration partners achieving certain milestones as defined in the collaboration agreements. The Group's best estimates of future commitments for such payments are given in Note 13.

Pharmaceuticals legal cases

Accutane. Hoffmann-La Roche Inc. ('HLR') and various other Roche affiliates have been named as defendants in numerous legal actions in the United States and elsewhere relating to the acne medication Accutane. The litigation alleges that Accutane caused certain serious conditions, including, but not limited to, inflammatory bowel disease ('IBD'), birth defects and psychiatric disorders. As of 31 December 2011 HLR was defending approximately 6,402 actions involving approximately 6,471 plaintiffs brought in various federal and state courts throughout the United States for personal injuries allegedly resulting from their use of Accutane. Most of the actions allege IBD as a result of Accutane use. On 26 June 2009 HLR announced that, following a re-evaluation of its portfolio of medicines that are now available from generic manufacturers, rapidly declining brand sales in the US and high costs from personal-injury lawsuits that it continues to defend vigorously, it had decided to immediately discontinue the manufacture and distribution of the product in the United States.

All of the actions pending in federal court alleging IBD were consolidated for pre-trial proceedings in a Multi-District Litigation in the United States District Court for the Middle District of Florida, Tampa Division. In July 2007 the District Court granted summary judgment in favour of HLR in the lead federal IBD cases. The plaintiffs appealed and in August 2008 these rulings were affirmed by the United States Court of Appeals for the Eleventh Circuit. In October 2009 the District Court granted summary judgment in favour of HLR in the next five federal IBD cases. The plaintiffs appealed in November 2009 and in May 2010 these rulings were affirmed by the United States Court of Appeals for the Eleventh Circuit. Multiple recently filed matters remain pending.

All of the actions pending in state court in New Jersey alleging IBD were consolidated for pre-trial proceedings in the Superior Court of New Jersey, Law Division, Atlantic County. As of 31 December 2011 juries in the Superior Court have ruled in favour of the plaintiff in six cases, assessing total compensatory damages totalling 50 million US dollars. The first verdict was reversed on appeal; the re-trial resulted in a verdict in favour of the plaintiff assessing total compensatory damages of 25.2 million US dollars; HLR is currently in the process of post-trial briefing.

The second verdict of 10.5 million US dollars was reversed on appeal; during 2011, the New Jersey Supreme Court accepted HLR's petition for certification to review the decision of the Superior Court of New Jersey, Appellate Division regarding this trial, which remains pending. HLR has appealed the third verdict, which involved three plaintiffs, to the Superior Court of New Jersey, Appellate Division, which remains pending. In 2011, one trial involving three plaintiffs was tried in the Superior Court; the jury reached defence verdicts in two of the cases and awarded compensatory damages of 2.15 million US dollars in the third case; the cases are in post-trial briefing. An additional trial commenced in November 2011 resulting in a mistrial when the jury could not reach a verdict. The next two trials, involving two plaintiffs each, are scheduled for 2012.

In October 2007 a jury in the Circuit Court of Escambia County, Florida, returned a verdict in favour of the plaintiff, assessing total compensatory damages of 7 million US dollars, subsequently reduced to 6.8 million US dollars by the Court, against the Company. In October 2009, the District Court of Appeal, State of Florida, reversed and entered judgment as to HLR. The Supreme Court of Florida declined to review plaintiff's appeal.

Additional trials may be scheduled for 2012. Individual trial results depend on a variety of factors, including many that are unique to the particular case and therefore the trial results to date may not be predictive of future trial results. The Group continues to defend vigorously the remaining personal injury cases and claims.

Cabilly patents. On 8 October 2009, Glaxo Group Limited, SmithKline Beecham Corporation, and GlaxoSmithKline LLC (collectively 'GSK') filed a patent lawsuit against Genentech and City of Hope in the US District Court for the Southern District of Florida. The lawsuit relates to patent No. 6,331,415 ('the Cabilly II patent') that is co-owned by Genentech and the City of Hope. The lawsuit seeks a declaratory judgment of patent invalidity and unenforceability with regard to the Cabilly II patent and of patent non-infringement with regard to a certain GSK product. On 16 December 2009 Genentech filed a motion to dismiss, or in the alternative to transfer to the Central District of California. GSK dismissed its Florida lawsuit in its entirety on 17 February 2010 and filed a related action on the same day in the Northern District of California. Genentech filed a motion to transfer to the Central District of California, an answer, and a counterclaim against GSK on 10 March 2010. On 12 April 2010 Genentech's motion to transfer was granted. On 23 February 2011 the Court issued a claim construction order, construing certain terms used in claims of the Cabilly II patent. Summary judgment motions are due to be filed on 27 January 2012.

Additional lawsuits between Genentech and GSK and/or Human Genome Sciences, Inc. ('HGS') involving the Cabilly II patent and related US Patent No. 7,923,221 ('the Cabilly III patent') are pending in the US District Court for the Central District of California, but proceedings in those cases have been stayed. The additional lawsuits include claims by GSK and/or HGS that the Cabilly patents are not infringed, are invalid, and are unenforceable, and that Genentech violated antitrust and unfair competition laws, and other laws.

The outcome of these matters cannot be determined at this time.

Rituxan arbitration (Sanofi/Hoechst). On 27 October 2008 Genentech and Biogen Idec Inc. filed a complaint against Sanofi-Aventis Deutschland GmbH ('Sanofi'), Sanofi-Aventis US LLC and Sanofi-Aventis US Inc. in the Northern District of California seeking a declaratory judgment that certain Genentech products, including Rituxan, do not infringe Sanofi's US Patents 5,849,522 and 6,218,140 and a declaratory judgment that the '522 and '140 patents are invalid. Also on 27 October 2008 Sanofi filed suit against Genentech and Biogen Idec in the Eastern District of Texas, Lufkin Division, claiming that Rituxan and at least eight other Genentech products infringe the '522 and '140 patents. Sanofi brought claims for preliminary and permanent injunctions, compensatory and exemplary damages, and other relief. Genentech challenged the venue of the Texas case and, after an opinion by the Federal Circuit Court of Appeals, the Texas and California cases were consolidated in the Northern District of California. The District Court issued a claim construction order on 23 June 2010. Sanofi filed a motion for reconsideration that was denied. Genentech and Biogen Idec filed motions for summary judgment that Sanofi opposed. The Court heard these motions on 12 November 2010 and on 7 March 2011 ruled that as a matter of law Genentech and Biogen Idec do not infringe any of the asserted patent claims. On 18 May 2011 Sanofi filed a notice of appeal of the Court's non-infringement ruling and its claim construction order. The appeal is pending.

In addition on 24 October 2008 Hoechst GmbH filed with the ICC International Court of Arbitration (Paris) a request for arbitration with Genentech, relating to a terminated agreement between one of Hoechst's predecessors and Genentech that pertained to the above patents and related patents outside the United States. Hoechst is seeking payments on royalties on sales of Genentech products, damages for breach of contract, and other relief. The ICC arbitration hearing was held on 30 August 2010 through 3 September 2010. In June 2011, the arbitrator issued an intermediate decision indicating that Rituxan is covered by the terminated agreement and ordering that Genentech produce certain Rituxan sales information from December 1998 to October 2008. The Group expects that the arbitrator will use this information to ascertain the amount of damages to be awarded to Hoechst. The Group has recorded an expense of 61 million Swiss francs, net of the assumed reimbursement of a portion of the Group's obligation by its co-promotion partner in the US, Biogen Idec. This has been recorded within 'Cost of sales' as a back royalty expense and as a corresponding increase in accrued liabilities on the balance sheet. The amounts accrued represent management's best estimate of the compensatory damages, including interest, which may be awarded to Hoechst based on the financial terms of the terminated agreement. The final amount of the decision may vary from the amounts provided if the nature and/or extent of the damages awarded to Hoechst differ from the Group's estimate or if Genentech successfully challenges the arbitrator's decision. On 11 July 2011 Genentech filed a Declaration of Appeal with the Court of Appeal of Paris to initiate legal proceedings challenging the arbitrator's decision. The arbitrator subsequently stated to the parties that his June 2011 decision "did not decide in the operative part the underlying issue of liability with respect of Rituxan". In light of that statement, Genentech will not pursue its previously filed action to challenge the arbitrator's decision (without prejudicing its ability to bring a challenge in the future). Genentech anticipates substantially completing briefing on liability, and on the amount owed under the license agreement if the arbitrator were to find liability, in March 2012. The hearing on those issues is currently scheduled for April or May of 2012.

The outcome of these matters cannot be determined at this time.

Rituxan investigation. On 4 October 2004 Genentech received a subpoena from the United States Department of Justice, requesting documents related to the promotion of Rituxan. Genentech co-operated with the government's associated investigation. Previously the investigation had been both civil and criminal in nature. Genentech was informed in August 2008 by the criminal prosecutor who handled this matter that the government has declined to prosecute Genentech criminally in connection with this investigation. The civil matter was still ongoing. Through counsel Genentech continued to have discussions with government representatives about the status of their investigation and Genentech's views on this matter, including potential resolution. On 20 October 2009 the government notified Genentech that it had decided not to make any civil claim against Genentech. The government's investigation was initiated by a complaint that was filed under seal in the US District Court for the Eastern District of Pennsylvania in 2003 by an individual plaintiff. The complaint was unsealed on 31 December 2009 and became the basis of civil litigation by the plaintiff against Roche Holdings, Inc. and Genentech. Following settlement discussions in 2011, the plaintiff, Genentech, and the government agreed to a settlement of all claims for approximately 35 million US dollars. The Court entered the order dismissing the case on 29 November 2011.

Average Wholesale Prices litigation. HLR, Roche Laboratories Inc. ('RLI') and Genentech, along with approximately 50 other brand and generic pharmaceutical companies, have been named as defendants in several legal actions in the United States relating to the pricing of pharmaceutical drugs and State Medicaid reimbursement. The primary allegation in these litigations is that the pharmaceutical companies misrepresented or otherwise reported inaccurate Average Wholesale Prices ('AWP') and/or Wholesale Acquisition Costs ('WAC') for their drugs, which prices were allegedly relied upon by the States in calculating Medicaid reimbursements to entities such as retail pharmacies. The States, through their respective Attorney General, are seeking repayment of the amounts they claim were over-reimbursed. The time period associated with these cases is 1991-2005. As of 31 December 2011, HLR and RLI are defending five actions filed in the following states: Alabama, Mississippi, New Jersey, Kansas and Louisiana. Genentech is defending one action filed in the state of Kansas. Discovery is currently pending in each of these cases. HLR, RLI and Genentech intend to vigorously defend themselves in these matters. The outcome of these matters cannot be determined at this time.

Brand Name Prescription Drugs litigations. HLR, along with various other branded pharmaceutical companies, has been named as a defendant in several legal actions in the United States brought by retail pharmacies relating to the discounting practices for Brand Name Prescription Drugs ('BNPD'). In these BNPD litigations, the plaintiffs allege that they were denied discounts for certain prescription drugs that were offered to other mail order and managed care entities, which denial is claimed to be a violation of the Robinson-Patman Act ('RPA'). The RPA is a Federal law that prohibits unlawful price discrimination. In addition, the plaintiffs alleged that the defendants conspired in their refusal to offer them certain discounts. The conspiracy claims against all defendants were previously settled, with only the RPA claims remaining to be litigated. As of 31 December 2011 HLR is defending approximately 801 BNPD actions brought in various federal and state courts throughout the United States. Discovery is currently pending in each of these cases. HLR is not currently scheduled for a trial in any of these BNPD matters in 2012. HLR intends to vigorously defend itself. The outcome of these matters cannot be determined at this time.

InterMune litigation. On 8 May, 11 June, 8 August, and 29 September 2008, Genentech was named as a defendant, along with InterMune, Inc. and its former chief executive officer, W. Scott Harkonen, in four separate class-action complaints filed in the US District Court for the Northern District of California on behalf of plaintiffs who allegedly paid part or all of the purchase price for a product that was licensed by Genentech to Connectics Corporation and was subsequently assigned to InterMune. Genentech responded to these complaints with a motion to dismiss these matters, which was granted on 28 April 2009. Plaintiffs filed amended complaints including only state law claims on 28 May 2009. Genentech responded to these complaints with another motion to dismiss, which was heard on 11 September 2009. The Court again granted Genentech's motion to dismiss with respect to all claims, but with leave for plaintiffs to replead specific claims under California unfair competition law. Plaintiffs filed an amended class action complaint on 23 December 2009 naming Genentech as a defendant in claims for unfair competition law, false advertising law, consumer remedies law, consumer protection law, and unjust enrichment. Genentech sought dismissal of this amended complaint. On 1 September 2010 the Court entered an order granting Genentech's motion to dismiss all claims against it with prejudice. Plaintiffs filed an appeal of the District Court's ruling with the United States Court of Appeals for the Ninth Circuit. On 30 December 2011 the Court of Appeals affirmed the District Court's ruling in all respects.

University of Pennsylvania litigation. On 11 May 2010 Genentech filed a patent lawsuit against the University of Pennsylvania in the US District Court for the Northern District of California. The lawsuit relates to United States Patent No. 6,733,752 and seeks a declaratory judgment of patent non-infringement and invalidity with regard to that patent. On 12 July 2010 the University counterclaimed against Genentech for infringement of the '752 patent, seeking unspecified damages based on the sales of Herceptin. Genentech filed its answer on 2 August 2010. On 9 May 2011 the Court issued a claim construction order, construing certain terms used in claims of the '752 patent. On 29 December 2011 the University filed a motion for summary adjudication of certain facts. By order dated 4 January 2012, the Court set 19 April 2012 as the hearing date for that motion. Trial is currently set for 11 June 2012. The outcome of this matter cannot be determined at this time.

PDL litigation. On 27 August 2010 PDL Biopharma ('PDL') filed a complaint against Genentech in Nevada state Court seeking a judicial declaration concerning Genentech's obligation to pay royalties on certain ex-US sales of Herceptin, Avastin, Xolair and Lucentis under a 2003 agreement between the parties. On 13 September 2010 PDL filed a first amended complaint asserting additional claims against Genentech, including breach of contract and breach of the implied covenant of good faith and fair dealing. PDL also asserted new claims against Roche and Novartis for intentional interference with contractual relations. In addition to declaratory relief, PDL is seeking monetary damages including liquidated and punitive damages. On 1 November 2010 Genentech and Roche filed a motion to dismiss for failure to state a claim, and Roche filed an additional motion to dismiss for lack of personal jurisdiction. The Court denied the motions on 7 July 2011. The outcome of this matter cannot be determined at this time.

GSK litigation. On 20 September 2010 GSK and Genentech each filed patent lawsuits against one another (and in the case of GSK, also against Roche Holding Ltd) in US District Courts for the District of Delaware and the Northern District of California, respectively. The lawsuits concern GSK's US Patent Nos. RE41,070 and RE41,555. GSK has asserted claims against Genentech and Roche alleging infringement of the '070 and '555 patents by certain 'therapeutic antibody products,' although the complaint only specifically refers to Herceptin. In its lawsuit Genentech is seeking a judicial declaration of non-infringement by certain Genentech products. In the Delaware action on 12 November 2010 Genentech filed a motion to dismiss for failure to state a claim and a motion to transfer the case to California. Roche filed a motion to dismiss for lack of personal jurisdiction (and joining Genentech's motion in the event its personal jurisdiction motion is denied). The parties subsequently stipulated to Roche's dismissal. Only Genentech remains a party and only its motion to transfer the case to California remains pending. In the California action on 1 December 2010 the Court entered an order staying the California action pending resolution by the Delaware Court of Genentech's motion to transfer. The outcome of these matters cannot be determined at this time.

Boniva litigation. HLR and various other Roche affiliates have been named as defendants in numerous legal actions in the United States and Canada relating to the post-menopausal osteoporosis medication Boniva. In these litigations, the plaintiffs allege that Boniva caused either osteonecrosis of the jaw ('ONJ') or atypical femoral fractures. As of 31 December 2011 HLR is defending approximately 122 actions brought in federal and state courts throughout the United States and 1 action brought in the Court of the Queen's Bench, Province of Saskatchewan, Canada, for personal injuries allegedly resulting from the use of Boniva. All of these cases are in the early discovery stages of litigation, with only one case set for trial in December 2012. Individual trial results depend on a variety of factors, including many that are unique to the particular case. HLR and the other named Roche affiliates intend to vigorously defend themselves in these matters. The outcome of these matters cannot be determined at this time.

Diagnostics legal cases

Marsh Supermarkets litigation. On 8 July 2008 Marsh Supermarkets Inc. ('Marsh') filed a breach of contract suit against Roche Diagnostics Operations, Inc. ('RDO'). The lawsuit relates to the termination of a sub-lease agreement for a building by RDO. After extensive argument during a bench trial a Hamilton Superior Court judge awarded Marsh damages amounting to 19.5 million US dollars, which has been accrued for as a legal provision in 2011. RDO intends to appeal this judgment. The outcome of this appeal cannot be determined at this time.

25. Other non-current liabilities

Other non-current liabilities in millions of CHF

	2011	2010	2009
Deferred income	63	74	109
Other long-term liabilities	247	263	307
Total other non-current liabilities	**310**	**337**	**416**

Other long-term liabilities consist mainly of accrued long-term employee benefits.

26. Debt

Debt: movements in carrying value of recognised liabilities in millions of CHF

	2011	2010
At 1 January	30,058	42,416
Proceeds from issue of bonds and notes	–	–
Redemption and repurchase of bonds and notes	(4,019)	(8,625)
Increase (decrease) in commercial paper	808	(86)
Increase (decrease) in other debt	19	(51)
(Gains) losses on redemption and repurchase of bonds and notes, net	143	255
Amortisation of debt discount [4]	35	47
Foreign currency transaction (gains) losses, net	(144)	(959)
Currency translation effects and other	(47)	(2,939)
At 31 December	**26,853**	**30,058**
Consisting of		
– Bonds and notes	25,418	29,499
– Commercial paper	1,022	166
– Amounts due to banks and other financial institutions	180	133
– Finance lease obligations [11]	225	238
– Other borrowings	8	22
Total debt	**26,853**	**30,058**
Reported as		
– Long-term debt	23,459	27,857
– Short-term debt	3,394	2,201
Total debt	**26,853**	**30,058**

The fair value of the bonds and notes is 29.7 billion Swiss francs (2010: 33.1 billion Swiss francs, 2009: 45.4 billion Swiss francs) and the fair value of total debt is 31.1 billion Swiss francs (2010: 33.6 billion Swiss francs, 2009: 46.1 billion Swiss francs). This is calculated based on the observable market prices of the debt instruments or the present value of the future cash flows on the instrument, discounted at a market rate of interest for instruments with similar credit status, cash flows and maturity periods.

There are no pledges on the Group's assets in connection with debt.

Bonds and notes

Recognised liabilities and effective interest rates of bonds and notes in millions of CHF

	Effective interest rate: Underlying instrument	Effective interest rate: Including hedging	2011	2010	2009
US dollar-denominated notes – floating rate	3 months LIBOR				
Notes due 25 February 2010, principal 3 billion US dollars	+1.13%	n/a	–	–	3,110
Notes due 25 February 2011, principal 931 million US dollars	+2.10%	n/a	–	871	964
US dollar-denominated notes – fixed rate					
4.50% notes due 1 March 2012, principal 2.5 billion US dollars	4.84%	n/a	–	–	2,578
5.00% notes due 1 March 2014, principal 2.75 billion US dollars, outstanding 1.75 billion US dollars (ISIN: USU75000AL00 and US771196AQ59)	5.31%	4.94%	1,637	2,652	2,826
6.00% notes due 1 March 2019, principal 4.5 billion US dollars (ISIN: USU75000AM82 and US771196AS16)	6.37%	n/a	4,163	4,137	4,577
7.00% notes due 1 March 2039, principal 2.5 billion US dollars (ISIN: USU75000AN65 and US771196AU61)	7.43%	n/a	2,268	2,257	2,500
European Medium Term Note programme – floating rate	3 months EURIBOR				
Notes due 4 March 2010, principal 1.5 billion euros	+1.05%	+0.92%	–	–	2,229
European Medium Term Note programme – fixed rate					
4.625% notes due 4 March 2013, principal 5.25 billion euros, outstanding 4.288 billion euros (ISIN: XS0415624393)	4.82%	5.53%	5,213	6,499	7,759
5.5% notes due 4 March 2015, principal 1.25 billion pounds sterling, outstanding 0.90 billion pounds sterling (ISIN: XS0415625283)	5.70%	5.77%	1,297	1,791	2,065
5.625% notes due 4 March 2016, principal 2.75 billion euros (ISIN: XS0415624120)	5.70%	6.37%	3,342	3,407	4,072
6.5% notes due 4 March 2021, principal 1.75 billion euros (ISIN: XS0415624716)	6.66%	6.99%	2,110	2,150	2,569
5.375% notes due 29 August 2023, principal 250 million pounds sterling, outstanding 200 million pounds sterling (ISIN: XS0175478873)	5.46%	n/a	287	356	411
Swiss franc bonds					
2.5% bonds due 23 March 2012, principal 2.5 billion Swiss francs, outstanding 2.2 billion Swiss francs (ISIN: CH0038365117)	2.68%	2.88%	2,208	2,497	2,490
4.5% bonds due 23 March 2017, principal 1.5 billion Swiss francs (ISIN: CH0039139263)	4.77%	n/a	1,483	1,480	1,477
Genentech Senior Notes					
4.40% Senior Notes due 15 July 2010, principal 500 million US dollars	4.53%	n/a	–	–	528
4.75% Senior Notes due 15 July 2015, principal 1 billion US dollars (ISIN: US368710AG46)	4.87%	n/a	940	935	1,037
5.25% Senior Notes due 15 July 2035, principal 500 million US dollars (ISIN: US368710AC32)	5.39%	n/a	470	467	518
Total			**25,418**	**29,499**	**41,710**

Bonds and notes: maturity in millions of CHF

	2011	2010	2009
Within one year	2,208	1,897	5,867
Between one and two years	5,213	2,497	964
Between two and three years	1,637	6,499	5,068
Between three and four years	2,237	1,626	7,759
Between four and five years	3,342	2,726	2,826
More than five years	10,781	14,254	19,226
Total bonds and notes	**25,418**	**29,499**	**41,710**

Unamortised discount included in carrying value of bonds and notes in millions of CHF

	2011	2010	2009
US dollar notes	157	77	222
Euro notes	41	60	91
Swiss franc bonds	18	23	33
Pound sterling notes	10	17	24
Total unamortised discount	**226**	**177**	**370**

Issuance of bonds and notes – 2011 and 2010

The Group did not issue any bonds or notes in 2011 and 2010.

Redemption and repurchase of bonds and notes – 2011

Redemption of US dollar-denominated notes. On the due date of 25 February 2011 the Group redeemed notes with a principal of 931 million US dollars at the original issue amount plus accrued original issue discount ('OID'). The effective interest rate of these notes was 3 months LIBOR plus 2.10%. The cash outflow was 862 million Swiss francs and there was no gain or loss recorded on the redemption.

Partial early redemption of US dollar-denominated notes. On 28 December 2010 the Group resolved to exercise its option to call for redemption a portion of the US dollar-denominated 5.00% fixed rate notes due 1 March 2014. The Group redeemed 1.0 billion US dollars of the total principal amount of 2.75 billion US dollars of these notes on 24 March 2011 at an amount equal to the sum of the present values of the remaining scheduled payments of these notes discounted to the redemption date at the US Treasury rate plus 0.50%, together with accrued and unpaid interest on the principal. The cash outflow was 999 million Swiss francs, plus accrued interest. As at 31 December 2010 the Group had already revised the carrying value of these notes to take into account the changes to the amounts and timings of the estimated cash flow. The increase in carrying value of 108 million Swiss francs was recorded within financing costs in 2010. An additional loss of 2 million Swiss francs was incurred in 2011 upon final settlement of the notes. The effective interest rate of these notes was 5.31%.

Partial repurchase of euro-denominated notes. On 28 June 2011 the Group completed a tender offer for a nominal amount of 962 million euros of the 4.625% fixed rate notes due 4 March 2013 with a total principal amount of 5.25 billion euros. The cash outflow was 1,197 million Swiss francs, plus accrued interest. The loss on repurchase of the notes was 57 million Swiss francs. In addition the Group terminated the currency swaps that were used to hedge the foreign currency risk on the euro-denominated notes. This created an additional loss of 29 million Swiss francs, reflecting the change in fair value of the hedging derivatives due to changes in interest rates. The total loss on repurchase of 86 million Swiss francs was recorded within financing costs (see Note 4). The effective interest rate of the notes repurchased was 5.53%.

Partial repurchase of Swiss franc-denominated bonds. On 2 November 2011 the Group completed a tender offer for a nominal amount of 302 million Swiss francs of the 2.5% fixed rate bonds due 23 March 2012 with a total principal amount of 2.5 billion Swiss francs. The cash outflow was 305 million Swiss francs, plus accrued interest. The loss on repurchase of the bonds was 3 million Swiss francs. The effective interest rate of the bonds repurchased was 2.88%.

Partial repurchase of pound sterling-denominated notes. On 5 December 2011 the Group completed a tender offer for a nominal amount of 350 million pounds sterling of the 5.5% fixed rate notes due 4 March 2015 with a total principal amount of 1.25 billion pounds sterling. The cash outflow was 568 million Swiss francs, plus accrued interest. The loss on repurchase of the notes was 65 million Swiss francs. The effective interest rate of the notes repurchased was 5.77%.

Partial repurchase of pound sterling-denominated notes. On 5 December 2011 the Group completed a tender offer for a nominal amount of 50 million pounds sterling of the 5.375% fixed rate notes due 29 August 2023 with a total principal amount of 250 million pounds sterling. The cash outflow was 88 million Swiss francs, plus accrued interest. The loss on repurchase of the notes was 16 million Swiss francs. The effective interest rate of the notes repurchased was 5.46%.

Redemption and repurchase of bonds and notes – 2010

Redemption of US dollar-denominated notes. On the due date of 25 February 2010 the Group redeemed notes with a principal of 3 billion US dollars at the original issue amount plus accrued original issue discount ('OID'). The effective interest rate of these notes was 3 months LIBOR plus 1.13%. The cash outflow was 3,244 million Swiss francs and there was no gain or loss recorded on the redemption.

Redemption of European Medium Term Note programme notes. On the due date of 4 March 2010 the Group redeemed notes with a principal of 1.5 billion euros at the original issue amount plus accrued original issue discount ('OID'). The effective interest rate of these notes was 3 months EURIBOR plus 1.05% (plus 0.92% including hedging). The cash outflow was 2,194 million Swiss francs and there was no gain or loss recorded on the redemption.

Redemption of Genentech Senior Notes. On the due date of 15 July 2010 the Group redeemed notes with a principal of 500 million US dollars at the original issue amount plus accrued original issue discount ('OID'). The effective interest rate of these bonds was 4.53%. The cash outflow was 526 million Swiss francs and there was no gain or loss recorded on the redemption.

Early redemption of US dollar-denominated notes. On 29 June 2010 the Group resolved to exercise its option to call for redemption the US dollar-denominated 4.50% fixed rate notes due 1 March 2012 with a principal of 2.5 billion US dollars. The Group redeemed these notes on 9 September 2010 at an amount equal to the sum of the present values of the remaining scheduled payments of these notes discounted to the redemption date at the US Treasury rate plus 0.50%, together with accrued and unpaid interest on the principal. The effective interest rate of these notes before the redemption was 4.84%. The cash outflow was 2,661 million Swiss francs, plus accrued interest. The loss on redemption of 147 million Swiss francs was recorded within financing costs (see Note 4).

Cash outflows from redemption and repurchase of bonds and notes in millions of CHF

	2011	2010
US dollar-denominated notes	(1,861)	(5,905)
European Medium Term Note programme euro-denominated notes	(1,197)	(2,194)
European Medium Term Note programme pound sterling-denominated notes	(656)	–
Swiss franc bonds	(305)	–
Genentech Senior Notes	–	(526)
Total cash outflows from redemption and repurchase of bonds and notes	**(4,019)**	**(8,625)**

Collateral arrangements

The Group has entered into various currency swaps for certain non-US dollar debt instruments that were issued in 2009. Collateral agreements were entered into with the counterparties to the currency swaps to mitigate counterparty risk. A total of 0.1 billion Swiss francs cash collateral was delivered to the Group (2010: 1.4 billion Swiss francs delivered by the Group). This collateral received in 2011 was recorded as an increase in cash and a corresponding increase in accrued liabilities. The carrying value of accrued liabilities in respect of these agreements at 31 December 2011 was 0.2 billion Swiss francs (31 December 2010: accrued liabilities of 0.1 billion Swiss francs).

Commercial paper

Roche Holdings, Inc. commercial paper program. In March 2009 Roche Holdings, Inc. established a commercial paper program under which it can issue up to 7.5 billion US dollars of unsecured commercial paper notes guaranteed by Roche Holding Ltd. A committed credit line of 3.9 billion euros is available as a back-stop line. The maturity of the notes under the program cannot exceed 365 days from the date of issuance. As at 31 December 2011 unsecured commercial paper notes with a principal amount of 1,087 million US dollars and an average interest rate of 0.08% were outstanding. These amounts were due at various dates until 8 March 2012.

Movements in commercial paper obligations in millions of CHF

	2011	2010
At 1 January	166	270
Net cash proceeds (payments)	808	(86)
Currency translation effects	48	(18)
At 31 December	**1,022**	**166**

Amounts due to banks and other financial institutions

These amounts are denominated in various currencies, notably in Chinese renminbi and Argentine pesos, and the average interest rate was 8.08%. The average interest rate in 2010 was 3.06%, when the balance was primarily denominated in Taiwanese dollars. Repayment dates are up to two years and 103 million Swiss francs (2010: 71 million Swiss francs) are due within one year.

27. Equity attributable to Roche shareholders

Changes in equity attributable to Roche shareholders in millions of CHF

	Share capital	Retained earnings	Reserves: Fair value	Reserves: Hedging	Reserves: Translation	Total
Year ended 31 December 2010						
At 1 January 2010	160	11,835	99	65	(4,793)	7,366
Net income recognised in income statement	–	8,666	–	–	–	8,666
Available-for-sale investments						
– Valuation gains (losses) taken to equity	–	–	113	–	–	113
– Transferred to income statement on sale or impairment	–	–	(102)	–	–	(102)
– Income taxes	–	–	6	–	–	6
– Non-controlling interests	–	–	1	–	–	1
Cash flow hedges						
– Gains (losses) taken to equity	–	–	–	(1,373)	–	(1,373)
– Transferred to income statement [a)]	–	–	–	1,073	–	1,073
– Income taxes	–	–	–	107	–	107
– Non-controlling interests	–	–	–	–	–	–
Currency translation of foreign operations						
– Exchange differences	–	–	(11)	3	(490)	(498)
– Non-controlling interests	–	–	–	–	(29)	(29)
Defined benefit post-employment plans						
– Actuarial gains (losses) [9]	–	(344)	–	–	–	(344)
– Limit on asset recognition [9]	–	(2)	–	–	–	(2)
– Income taxes	–	80	–	–	–	80
– Non-controlling interests	–	16	–	–	–	16
Other comprehensive income, net of tax	**–**	**(250)**	**7**	**(190)**	**(519)**	**(952)**
Total comprehensive income	**–**	**8,416**	**7**	**(190)**	**(519)**	**7,714**
Dividends	–	(5,144)	–	–	–	(5,144)
Equity compensation plans, net of transactions in own equity instruments	–	(467)	–	–	–	(467)
Changes in non-controlling interests	–	–	–	–	–	–
Other movements	–	(90)	68	22	–	–
At 31 December 2010	**160**	**14,550**	**174**	**(103)**	**(5,312)**	**9,469**

a) Of amounts transferred to income statement, gains of 29 million Swiss francs were reported as 'Royalties and other operating income' and losses of 1,102 million Swiss francs as 'Financial income'.

Changes in equity attributable to Roche shareholders in millions of CHF

	Share capital	Retained earnings	Reserves: Fair value	Reserves: Hedging	Reserves: Translation	Total
Year ended 31 December 2011						
At 1 January 2011	160	14,550	174	(103)	(5,312)	9,469
Net income recognised in income statement	–	9,343	–	–	–	9,343
Available-for-sale investments						
– Valuation gains (losses) taken to equity	–	–	(19)	–	–	(19)
– Transferred to income statement on sale or impairment	–	–	(60)	–	–	(60)
– Income taxes	–	–	27	–	–	27
– Non-controlling interests	–	–	2	–	–	2
Cash flow hedges						
– Gains (losses) taken to equity	–	–	–	(92)	–	(92)
– Transferred to income statement [a)]	–	–	–	204	–	204
– Income taxes	–	–	–	(40)	–	(40)
– Non-controlling interests	–	–	–	–	–	–
Currency translation of foreign operations						
– Exchange differences	–	–	–	11	(24)	(13)
– Accumulated differences transferred to income statement on divestment [33]	–	–	–	–	20	20
– Non-controlling interests	–	–	–	–	(118)	(118)
Defined benefit post-employment plans						
– Actuarial gains (losses) [9]	–	(1,184)	–	–	–	(1,184)
– Limit on asset recognition [9]	–	(6)	–	–	–	(6)
– Income taxes	–	350	–	–	–	350
– Non-controlling interests	–	4	–	–	–	4
Other comprehensive income, net of tax	**–**	**(836)**	**(50)**	**83**	**(122)**	**(925)**
Total comprehensive income	**–**	**8,507**	**(50)**	**83**	**(122)**	**8,418**
Dividends	–	(5,614)	–	–	–	(5,614)
Equity compensation plans, net of transactions in own equity instruments	–	(178)	–	–	–	(178)
Changes in non-controlling interests	–	–	–	–	–	–
At 31 December 2011	**160**	**17,265**	**124**	**(20)**	**(5,434)**	**12,095**

a) The entire losses transferred to income statement of 204 million Swiss francs were reported as 'Financial income'.

The Group completed the purchase of the non-controlling interests in Genentech effective 26 March 2009. Based on the revised International Accounting Standard 27 'Consolidated and Separate Financial Statements' (IAS 27), which was adopted by the Group in 2008, this transaction was accounted for in full as an equity transaction. As a consequence, the carrying amount of the consolidated equity of the Group at that time was reduced by 52.2 billion Swiss francs, of which 8.5 billion Swiss francs was allocated to eliminate the book value of Genentech non-controlling interests. This accounting effect significantly impacted the Group's net equity, but has no effect on the Group's business or its dividend policy.

Share capital

As of 31 December 2011, the authorised and issued share capital of Roche Holding Ltd, which is the Group's parent company, consisted of 160,000,000 shares with a nominal value of 1.00 Swiss franc each, as in the preceding year. The shares are bearer shares and the Group does not maintain a register of shareholders. Based on information supplied to the Group, a shareholder group with pooled voting rights owns 45.01% (2010: 50.0125%) of the issued shares. On 24 March 2011 the shareholder group announced that it would continue the shareholder pooling agreement existing since 1948 with a modified shareholder composition. The shareholder group with pooled voting rights now holds 72,018,000 shares, corresponding to 45.01% of the shares issued. This figure does not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, holds now 8,091,900 shares representing 5.057% of the voting rights independently of the pool. This is further described in Note 32. Based on information supplied to the Group, Novartis Ltd, Basel, and its affiliates own 33.3330% (participation below 33⅓%) of the issued shares (2010: 33.3330%).

Non-voting equity securities *(Genussscheine)*

As of 31 December 2011, 702,562,700 non-voting equity securities have been authorised and were in issue as in the preceding year. Under Swiss company law these non-voting equity securities have no nominal value, are not part of the share capital and cannot be issued against a contribution which would be shown as an asset in the balance sheet of Roche Holding Ltd. Each non-voting equity security confers the same rights as any of the shares to participate in the net profit and any remaining proceeds from liquidation following repayment of the nominal value of the shares and, if any, participation certificates. In accordance with the law and the Articles of Incorporation of Roche Holding Ltd, the Company is entitled at all times to exchange all or some of the non-voting equity securities into shares or participation certificates.

Dividends

On 1 March 2011 the shareholders approved the distribution of a dividend of 6.60 Swiss francs per share and non-voting equity securities (2010: 6.00 Swiss francs) in respect of the 2010 business year. The distribution to holders of outstanding shares and non-voting equity securities totalled 5,614 million Swiss francs (2010: 5,144 million Swiss francs) and has been recorded against retained earnings in 2011. The Board of Directors has proposed dividends for the 2011 business year of 6.80 Swiss francs per share and non-voting equity security which, if approved, would result in a total distribution to shareholders of 5,865 million Swiss francs. This is subject to approval at the Annual General Meeting on 6 March 2012.

Own equity instruments

Holdings of own equity instruments in equivalent number of non-voting equity securities

	31 December 2011 (millions)	31 December 2010 (millions)
Non-voting equity securities	15.1	11.2
Derivative instruments	9.9	9.9
Total	**25.0**	**21.1**

Own equity instruments are recorded within equity at original purchase cost. Details of own equity instruments held at 31 December 2011 are shown in the table below. Fair values are disclosed for information purposes.

Own equity instruments at 31 December 2011: supplementary information

	Equivalent number of non-voting equity securities (millions)	Maturity	Strike price (CHF)	Market value (CHF billions)
Non-voting equity securities	15.1	–	–	2.4
Derivative instruments	9.9	8 Feb. 2012–16 Sep. 2016	145.40–229.60	0.1
Total	**25.0**			**2.5**

Non-voting equity securities and derivative instruments are held for the Group's potential conversion obligations that may arise from the Roche Option Plan, Roche Stock-settled Stock Appreciation Rights and Roche Restricted Stock Unit Plan (see Note 10). These mainly consist of call options that are exercisable at any time up to their maturity.

The Group holds none of its own shares.

Reserves

Fair value reserve. The fair value reserve represents the cumulative net change in the fair value of available-for-sale financial assets until the asset is sold, impaired or otherwise disposed of.

Hedging reserve. The hedging reserve represents the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred.

Translation reserve. The translation reserve represents the cumulative currency translation differences relating to the consolidation of Group companies that use functional currencies other than Swiss francs.

28. Earnings per share and non-voting equity security

Basic earnings per share and non-voting equity security

For the calculation of basic earnings per share and non-voting equity security, the number of shares and non-voting equity securities is reduced by the weighted average number of its own non-voting equity securities held by the Group during the period.

Basic earnings per share and non-voting equity security

	2011	2010
Net income attributable to Roche shareholders (CHF millions)	9,343	8,666
Number of shares (millions) [27]	160	160
Number of non-voting equity securities (millions) [27]	703	703
Weighted average number of own non-voting equity securities held (millions)	(14)	(8)
Weighted average number of shares and non-voting equity securities in issue (millions)	**849**	**855**
Basic earnings per share and non-voting equity security (CHF)	11.01	10.14

Diluted earnings per share and non-voting equity security

For the calculation of diluted earnings per share and non-voting equity security, the net income and weighted average number of shares and non-voting equity securities outstanding are adjusted for the effects of all dilutive potential shares and non-voting equity securities.

Potential dilutive effects arise from the employee stock option plans. The exercise of outstanding vested employee stock options would have a dilutive effect. The exercise of the outstanding vested Chugai stock options would have a dilutive effect if the net income of Chugai were positive. The diluted earnings per share and non-voting equity security reflects the potential impacts of these dilutive effects on the earnings per share figures.

Diluted earnings per share and non-voting equity security

	2011	2010
Net income attributable to Roche shareholders (CHF millions)	9,343	8,666
Increase in non-controlling interests' share of Group net income, assuming all outstanding Chugai stock options exercised (CHF millions)	(1)	(1)
Net income used to calculate diluted earnings per share (CHF millions)	**9,342**	**8,665**
Weighted average number of shares and non-voting equity securities in issue (millions)	849	855
Adjustment for assumed exercise of equity compensation plans, where dilutive (millions)	2	2
Weighted average number of shares and non-voting equity securities in issue used to calculate diluted earnings per share (millions)	**851**	**857**
Diluted earnings per share and non-voting equity security (CHF)	10.98	10.11

29. Non-controlling interests

Changes in equity attributable to non-controlling interests in millions of CHF

	2011	2010
At 1 January	2,193	2,048
Net income recognised in income statement		
– Chugai [3]	188	206
– Other non-controlling interests	13	19
Total net income recognised in income statement	**201**	**225**
Available-for-sale investments	(2)	(1)
Cash flow hedges	–	–
Currency translation of foreign operations	118	29
Defined benefit post-employment plans	(4)	(16)
Other comprehensive income, net of tax	**112**	**12**
Total comprehensive income	**313**	**237**
Dividends to non-controlling shareholders		
– Chugai [3]	(100)	(99)
– Other non-controlling interests	(20)	(8)
Equity compensation plans, net of transactions in own equity instruments	1	1
Changes in non-controlling interests	–	–
Equity contribution by non-controlling interests	–	14
At 31 December	**2,387**	**2,193**
Of which		
– Chugai [3]	2,315	2,130
– Other non-controlling interests	72	63
Total non-controlling interests	**2,387**	**2,193**

30. Statement of cash flows

Cash flows from operating activities

Cash flows from operating activities arise from the Group's primary activities in the Pharmaceuticals and Diagnostics businesses. These are calculated by the indirect method by adjusting the Group's operating profit for any operating income and expenses that are not cash flows (for example depreciation, amortisation and impairment) in order to derive the cash generated from operations. This and other operating cash flows are shown in the statement of cash flows. Operating cash flows also include income taxes paid on all activities.

Cash generated from operations in millions of CHF

	2011	2010
Net income	9,544	8,891
Add back non-operating (income) expense		
– Associates [14]	(12)	3
– Financial income [4]	(647)	(557)
– Financing costs [4]	2,228	2,829
– Income taxes [5]	2,341	2,320
Operating profit	**13,454**	**13,486**
Depreciation of property, plant and equipment [11]	1,848	1,933
Amortisation of intangible assets [13]	520	619
Impairment of intangible assets [13]	138	667
Impairment of property, plant and equipment [11]	96	138
Impairment of net assets-held-for-sale [7]	117	–
Operating expenses for defined benefit post-employment plans [9]	334	235
Operating expenses for equity-settled equity compensation plans [10]	370	302
Net (income) expense for provisions [24]	536	1,625
Bad debt expense	193	182
Inventory write-downs	423	374
Other adjustments	9	(125)
Cash generated from operations	**18,038**	**19,436**

Cash flows from investing activities

Cash flows from investing activities are principally those arising from the Group's investments in property, plant and equipment and intangible assets, and from the acquisition and divestment of subsidiaries, associates and businesses. Cash flows connected with the Group's portfolio of marketable securities and other investments are also included, as are any interest and dividend payments received in respect of these securities and investments. These cash flows indicate the Group's net reinvestment in its operating assets and the cash flow effects of business combinations and divestments, as well as the cash generated by the Group's other investments.

Interest and dividends received in millions of CHF

	2011	2010
Interest received	41	57
Dividends received	1	2
Total	**42**	**59**

Cash flows from financing activities

Cash flows from financing activities are primarily the proceeds from the issue and repayment of the Group's equity and debt instruments. They also include interest payments and dividend payments on these instruments. Cash flows from short-term financing, including finance leases, are also included. These cash flows indicate the Group's transactions with the providers of its equity and debt financing. Cash flows from short-term borrowings are shown as a net movement, as these consist of a large number of transactions with short maturity.

Significant non-cash transactions

There were no significant non-cash transactions in 2011 (2010: none).

31. Risk management

Group risk management

Risk management is a fundamental element of the Group's business practice on all levels and encompasses different types of risks. At a group level risk management is an integral part of the business planning and controlling processes. Material risks are monitored and regularly discussed with the Corporate Executive Committee and the Audit Committee of the Board of Directors. Financial risk management specifically is described in further detail below.

Financial risk management

The Group is exposed to various financial risks arising from its underlying operations and corporate finance activities. The Group's financial risk exposures are predominantly related to changes in foreign exchange rates, interest rates and equity prices as well as the creditworthiness and the solvency of the Group's counterparties.

Financial risk management within the Group is governed by policies reviewed by the boards of directors of Roche or Chugai as appropriate to their areas of statutory responsibility. These policies cover credit risk, liquidity risk and market risk. The policies provide guidance on risk limits, type of authorised financial instruments and monitoring procedures. As a general principle, the policies prohibit the use of derivative financial instruments for speculative trading purposes. Policy implementation and day-to-day risk management are carried out by the relevant treasury functions and regular reporting on these risks is performed by the relevant accounting and controlling functions within Roche and Chugai.

Carrying value and fair value of financial assets in millions of CHF

By line items in Notes	Available-for-sale	FVtPL[a] – held-for-trading	Held-to-maturity	Loans and receivables	Total	Fair value
	Carrying value by asset class					
Year ended 31 December 2011						
Accounts receivable	–	–	–	9,799	9,799	9,799
Accrued interest income	–	–	–	20	20	20
Marketable securities:						
– Money market instruments and time accounts over three months	5,764	–	–	–	5,764	5,764
– Bonds and debentures	1,428	–	–	–	1,428	1,428
– Shares	241	–	–	–	241	241
– Other investments	–	–	–	–	–	–
Cash and cash equivalents	–	–	–	3,854	3,854	3,854
Derivative financial instruments	–	274	–	–	274	274
Available-for-sale investments	201	–	–	–	201	201
Held-to-maturity investments	–	–	–	–	–	–
Loans receivable	–	–	–	6	6	6
Long-term trade receivables	–	–	–	35	35	35
Other financial current assets	–	–	–	699	699	699
Restricted cash	–	–	–	37	37	37
Other long-term assets	–	–	–	81	81	81
Total	**7,634**	**274**	**–**	**14,531**	**22,439**	**22,439**
Year ended 31 December 2010						
Accounts receivable	–	–	–	9,403	9,403	9,403
Accrued interest income	–	–	–	53	53	53
Marketable securities:						
– Money market instruments and time accounts over three months	7,170	–	4	–	7,174	7,174
– Bonds and debentures	1,614	–	–	–	1,614	1,614
– Shares	272	–	–	–	272	272
– Other investments	–	–	–	–	–	–
Cash and cash equivalents	–	–	–	1,841	1,841	1,841
Derivative financial instruments	–	485	–	–	485	485
Available-for-sale investments	239	–	–	–	239	239
Held-to-maturity investments	–	–	–	–	–	–
Loans receivable	–	–	–	9	9	9
Long-term trade receivables	–	–	–	75	75	75
Other financial current assets	–	–	–	612	612	612
Restricted cash	–	–	–	41	41	41
Other long-term assets	–	–	–	64	64	64
Total	**9,295**	**485**	**4**	**12,098**	**21,882**	**21,882**

a) Fair-value-through-profit-or-loss.

Following the implementation of amendments to IFRS 7 'Financial Instruments: Disclosures' that were published in March 2009 the Group has established a fair value hierarchy that reflects the significance of inputs used in making the fair value measurements. The fair value hierarchy includes the following three levels:

- Level 1 – quoted prices in active markets for identical assets and liabilities.
- Level 2 – observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – unobservable inputs.

Fair value hierarchy of financial assets and liabilities at 31 December 2011 in millions of CHF

	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Marketable securities:				
– Money market instruments and time accounts over three months	3,524	2,240	–	5,764
– Bonds and debentures	1,187	241	–	1,428
– Shares	226	15	–	241
Derivative financial instruments	–	274	–	274
Available-for-sale investments	17	131	–	148
Total	**4,954**	**2,901**	**–**	**7,855**
Financial liabilities recognised at fair value				
Derivative financial instruments	–	(104)	–	(104)
Total	**–**	**(104)**	**–**	**(104)**

Fair value hierarchy of financial assets and liabilities at 31 December 2010 in millions of CHF

	Level 1	Level 2	Level 3	Total
Financial assets recognised at fair value				
Marketable securities:				
– Money market instruments and time accounts over three months	2,585	4,589	–	7,174
– Bonds and debentures	1,304	310	–	1,614
– Shares	255	17	–	272
Derivative financial instruments	–	485	–	485
Available-for-sale investments	36	164	–	200
Total	**4,180**	**5,565**	**–**	**9,745**
Financial liabilities recognised at fair value				
Derivative financial instruments	–	(102)	–	(102)
Total	**–**	**(102)**	**–**	**(102)**

Available-for-sale investments exclude equity securities held at cost of 53 million Swiss francs (2010: 39 million Swiss francs), as those are not carried at fair value (see Note 15).

At 31 December 2011 Level 1 financial assets consist of treasury bills, bonds and quoted shares. Level 2 financial assets consist primarily of commercial paper, certificates of deposit, derivative financial instruments and unquoted shares. There were no significant transfers between Level 1 and Level 2 and vice versa.

Changes in fair value of Level 3 financial assets in millions of CHF

	2011	2010
At 1 January	–	19
Impairment charges	–	–
Valuation gains (losses) taken to equity	–	2
Gains (losses) recognised in the income statement	–	–
Sales	–	(21)
Currency translation difference	–	–
At 31 December	**–**	**–**

Credit risk

Credit risk arises from the possibility that counterparties to transactions may default on their obligations, causing financial losses for the Group. The objective of managing counterparty credit risk is to prevent losses of liquid funds deposited with or invested in such counterparties.

The maximum exposure to credit risk resulting from financial activities, without considering netting agreements and without taking account of any collateral held or other credit enhancements, is equal to the carrying value of the Group's financial assets.

Trade receivables. These are subject to a policy of active credit risk management which focuses on the assessment of country risk, credit availability, ongoing credit evaluation and account monitoring procedures. The objective of the management of trade receivables is to sustain the growth and profitability of the Group by optimising asset utilisation whilst maintaining risks at an acceptable level. Except as noted below, there is no significant concentration of counterparty credit risk due to the Group's large number of customers and their wide geographical spread. Risk limits and exposures are continuously monitored by country and by the nature of counterparties. Additionally, the Group obtains credit insurance and similar enhancements when appropriate to protect the collection of trade receivables. As at 31 December 2011 no collateral was held for loans and receivables (2010: none).

At 31 December 2011 the Group's combined trade accounts receivable balance with three US national wholesale distributors, AmerisourceBergen Corp., Cardinal Health, Inc. and McKesson Corp., was equivalent to 1.3 billion Swiss francs representing 13% of the Group's consolidated trade accounts receivable (2010: 1.1 billion Swiss francs representing 12%).

At 31 December 2011 the Group's combined trade accounts receivable with public customers in Southern Europe (Spain, Italy, Greece and Portugal) was equivalent to 2.1 billion Swiss francs representing 21% of the Group's consolidated trade accounts receivables (2010: 2.3 billion Swiss francs representing 23%). Trade receivables in Spain, Italy and Portugal increased during 2011, while receivables in Greece decreased, mainly due to the settlement of trade receivables with zero coupon government bonds, redeemable between 2011 and 2013. 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 nature and geographic location of counterparties to trade receivables that are not overdue are shown in the table below. These include the not overdue balances with US national wholesalers and Southern Europe public customers described above.

Trade receivables (not overdue): nature and geographical location of counterparties in millions of CHF

				2011				2010
Regions	Total	Public	Whole-salers/ distributors	Private	Total	Public	Whole-salers/ distributors	Private
Switzerland	98	32	9	57	89	42	8	39
European Union	2,091	739	872	480	1,993	703	748	542
Rest of Europe	398	15	333	50	468	30	389	49
North America	1,949	87	1,562	300	1,712	91	1,344	277
Latin America	508	107	209	192	552	134	226	192
Japan	1,468	29	1,405	34	1,429	1	1,405	23
Rest of Asia	862	105	404	353	678	99	241	338
Africa, Australia and Oceania	280	98	72	110	214	36	84	94
Total	**7,654**	**1,212**	**4,866**	**1,576**	**7,135**	**1,136**	**4,445**	**1,554**

Cash and marketable securities. These are subject to a policy of restricting exposures to high-quality counterparties and setting defined limits for individual counterparties. These limits and counterparty credit ratings are reviewed regularly. Investments in marketable securities are entered into on the basis of guidelines with regard to liquidity, quality and maximum amount. As a general rule, the Group invests only in high-quality securities with adequate liquidity. Cash and short-term time deposits are subject to rules which limit the Group's exposure to individual financial institutions. Within its fixed income marketable securities, the Group holds 4.4 billion Swiss francs government securities, of which 68% are with Switzerland, and all of which are with counterparties with a rating of 'AA' or better, with the exception of Greece (5 million Swiss francs as of 31 December 2011). The Greek government bonds, which have been allocated to the 'Below BBB' range, relate to the settlement of overdue receivables in 2010 and 2011.

Rating analysis of cash and fixed income marketable securities (market values)

		2011		2010
	(mCHF)	(% of total)	(mCHF)	(% of total)
AAA-range	5,891	53	6,325	60
AA-range	2,923	27	3,104	29
A-range	2,211	20	1,008	9
BBB-range	15	0	120	1
Below BBB-range	6	0	71	1
Total	**11,046**	**100**	**10,628**	**100**

Derivatives. The Group signs netting and collateral agreements under an ISDA (International Swaps and Derivatives Association) master agreement with the respective counterparties in order to mitigate counterparty risk on derivative positions. During 2009 the Group entered into derivative contracts with third parties to hedge the foreign exchange risk arising from bonds and notes issued by the Group's US affiliate, Roche Holdings, Inc. in currencies other than US dollar. The total exposure hedged at issuance of these bonds and notes was approximately 25 billion Swiss francs (see Note 26). In 2010 the Group returned 1.4 billion Swiss francs due to the strengthening of the US dollar against the euro and pound sterling. A total of 0.1 billion Swiss francs cash collateral was delivered to the Group in 2011. The collateral agreements set out that only cash is acceptable as collateral. All collateral received or delivered as at 31 December 2011 related to derivative activities.

Overdue assets. Financial assets which are past due but not impaired total 2.3 billion Swiss francs (2010: 2.5 billion Swiss francs).

Analysis of overdue but not impaired financial assets by class in millions of CHF

	Total amount overdue	under 1 month	1–3 months	4–6 months	6–12 months	more than 1 year
Year ended 31 December 2011						
Loans and receivables	2,332	472	500	455	407	498
Year ended 31 December 2010						
Loans and receivables	2,476	437	479	451	353	756

As at 31 December 2011 there are no other financial assets whose terms have been renegotiated (2010: none).

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. Group liquidity is reported to senior management on a monthly basis.

Roche and Chugai enjoy strong credit quality and are rated by at least one major credit rating agency. The ratings will permit efficient access to the international capital markets in the event of major financing requirements. In addition, the Group has unused committed credit lines with various financial institutions totalling 5.2 billion Swiss francs (2010: 4.5 billion Swiss francs). The decline in undiscounted financial liabilities, shown in the table below, is mainly due to debt repayments and interest paid.

Contractual maturity analysis of financial liabilities in millions of CHF

	Total	0–3 months	4–6 months	7–12 months	1–2 years	2–3 years	3–4 years	4–5 years	Over 5 years
Year ended 31 December 2011									
Total debt [a]	38,224	4,351	43	319	6,555	2,689	3,248	4,239	16,780
Trade payables	1,212	1,206	5	1	–	–	–	–	–
Accruals	5,450	4,266	646	459	79	–	–	–	–
Derivative financial instruments	104	30	33	41	–	–	–	–	–
Other liabilities: current and non-current	1,088	676	57	69	110	51	50	48	27
Total financial liabilities	**46,078**	**10,529**	**784**	**889**	**6,744**	**2,740**	**3,298**	**4,287**	**16,807**
Year ended 31 December 2010									
Total debt [a]	44,364	3,143	45	317	4,031	8,184	2,850	3,928	21,866
Trade payables	1,141	1,133	5	2	1	–	–	–	–
Accruals	4,933	3,386	1,082	380	85	–	–	–	–
Derivative financial instruments	102	74	15	13	–	–	–	–	–
Other liabilities: current and non-current	1,192	762	45	72	120	44	39	46	64
Total financial liabilities	**51,732**	**8,498**	**1,192**	**784**	**4,237**	**8,228**	**2,889**	**3,974**	**21,930**

a) Total debt in the above table shows undiscounted cash flows, whereas the carrying value in the consolidated balance sheet reflects discounted cash flows.

Market risk

Market risk arises from changing market prices of the Group's financial assets or financial liabilities. Market risk may affect the Group financial result and the value of Group equity.

The Group uses Value-at-Risk (VaR) to measure the impact of market risk on its financial instruments. Roche has defined VaR limits to manage market risk. VaR data are reported on a monthly basis and indicate the value range within which a given financial instrument will fluctuate with a pre-set probability as a result of movements in market prices. VaR is a statistical measure which implicitly assumes that value changes of the recent past are indicative of value changes in the future. VaR figures do not represent actual or expected losses, or possible worst-case losses over the stated period.

VaR figures are calculated using a historical simulation approach. For each scenario, all financial instruments are fully valued and the total change in value and earnings is determined. All VaR calculations are based on a 95% confidence level and a holding period of 20 trading days over the past ten years. This holding period reflects the time required to change the corresponding risk exposure, should this be deemed appropriate. Longer holding periods increase the probability of higher value changes and lead to increased VaR figures.

Actual future 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 exchange rates and equity investment prices, particularly in periods of high market volatilities. Furthermore, the VaR numbers below do not include the effect of changes in credit spreads.

Market risk of financial instruments in millions of CHF

	31 December 2011	31 December 2010
VaR – Interest rate component	301	466
VaR – Foreign exchange component	49	44
VaR – Other price component	35	34
Diversification	(69)	(77)
VaR – Total market risk	**316**	**467**

At 31 December 2011 the total VaR of the financial assets and liabilities was 316 million Swiss francs (31 December 2010: 467 million Swiss francs). The interest rate VaR decreased to 301 million Swiss francs reflecting the ageing of debt and the repayment of debt during 2011. 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 increased slightly due to lower diversification effects. Other price risk arises mainly from movements in the prices of equity securities and remained largely stable. At 31 December 2011 the Group held equity securities with a market value of 0.4 billion Swiss francs (31 December 2010: 0.5 billion Swiss francs). This includes holdings in biotechnology companies, which were acquired in the context of licensing transactions or scientific collaborations.

Foreign exchange risk

The Group operates across the world and is exposed to movements in foreign currencies affecting the Group financial result and the value of Group's equity. Foreign exchange risk arises because the amount of local currency paid or received for transactions denominated in foreign currencies may vary due to changes in exchange rates ('transaction exposures') and because the foreign currency denominated financial statements of the Group's foreign subsidiaries may vary upon consolidation into the Swiss franc-denominated Group Financial Statements ('translation exposures').

The objective of the Group's foreign exchange risk management activities is to preserve the economic value of its current and future assets and to minimise the volatility of the Group's financial result. The primary focus of the Group's foreign exchange risk management activities is on hedging transaction exposures arising through foreign currency flows or monetary positions held in foreign currencies. The Group does not currently hedge translation exposures using financial instruments.

The Group monitors transaction exposures on a daily basis. The net foreign exchange result and the corresponding VaR parameters are reported on a monthly basis. The Group uses forward contracts, foreign exchange options and cross-currency swaps to hedge transaction exposures. Application of these instruments intends to continuously lock in favourable developments of foreign exchange rates, thereby reducing the exposure to potential future movements in such rates.

Interest rate risk

Interest rate risk arises from movements in interest rates which could affect the Group financial result or the value of Group equity. Changes in interest rates may cause variations in interest income and expense. In addition, they may affect the market value of certain financial assets, liabilities and hedging instruments. The primary objective of the Group's interest rate management is to protect the net interest result.

Interest rate exposures and the corresponding VaR parameters are reported on a monthly basis. The Group may use forward contracts, options and swaps to hedge its interest rate exposures. Depending on the interest rate environment of major currencies, the Group will use these instruments to generate the appropriate mix of fixed and floating rate exposures.

Other price risk

Other price risk arises mainly from movements in the prices of equity securities. The Group manages the price risk through placing limits on individual and total equity investments. These limits are defined both as a percentage of total liquid funds and as an absolute number for individual equity investments. Equity price risk is reported as a VaR figure on a monthly basis to senior management.

Impairment of financial assets

In 2011 and 2010 impairments of loans and receivables were mainly due to an increase in the expected non-recoverability of trade receivables. The write downs of debt securities of 16 million Swiss francs in 2011 relate to Greek government bonds received in exchange for trade receivables (see also Note 17).

Impairment losses by asset classes in millions of CHF

	2011	2010
Loans and receivables	(193)	(182)
Available-for-sale financial assets		
– Shares	(3)	–
– Investments	(35)	(19)
– Debt securities	(16)	–
Total impairment losses	**(247)**	**(201)**

Capital

The Group defines the capital that it manages as the Group's total capitalisation, being the sum of debt plus equity, including non-controlling interests. The Group's objectives when managing capital are:

- To safeguard the Group's ability to continue as a going concern, so that it can continue to provide benefits for patients and returns to investors.
- To provide an adequate return to investors based on the level of risk undertaken.
- To have available the necessary financial resources to allow the Group to invest in areas that may deliver future benefits for patients and returns to investors.
- To maintain sufficient financial resources to mitigate against risks and unforeseen events.

The Group completed the purchase of the non-controlling interests in Genentech effective 26 March 2009 for a consideration, net of tax effects, of approximately 52.2 billion Swiss francs. Based on the revised International Accounting Standard 27 'Consolidated and Separate Financial Statements' (IAS 27), which was adopted by the Group in 2008, this transaction was accounted for in full as an equity transaction. As a consequence, the carrying amount of the consolidated equity of the Group was reduced by 52.2 billion Swiss francs, of which 8.5 billion Swiss francs was allocated to eliminate the book value of Genentech non-controlling interests. This accounting effect significantly impacts the Group's net equity, but has no effect on the Group's business or its dividend policy.

Capital is monitored on the basis of the capitalisation, which is calculated as being debt plus equity (including non-controlling interests). This is reported to senior management as part of the Group's regular internal management reporting. The Group's capitalisation is shown in the table below.

Capital in millions of CHF

	2011	2010	2009
Capital and reserves attributable to Roche shareholders [27]	12,095	9,469	7,366
Equity attributable to non-controlling interests [29]	2,387	2,193	2,048
Total equity	**14,482**	**11,662**	**9,414**
Total debt [26]	**26,853**	**30,058**	**42,416**
Capitalisation	**41,335**	**41,720**	**51,830**

The Group is not subject to regulatory capital adequacy requirements as known in the financial services industry.

The Group has a majority shareholding in Chugai (see Note 3). Chugai is a public company and its objectives, policies and processes for managing its own capital are determined by local management.

32. Related parties

Controlling shareholders

The share capital of Roche Holding Ltd, which is the Group's parent company, consists of 160,000,000 bearer shares. As of 31 December 2010, based on information supplied to the Group, a shareholder group with pooled voting rights owned 80,020,000 shares, which represented 50.0125% of the issued shares. This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Ms Maja Oeri, Mr Jörg Duschmalé and Mr Lukas Duschmalé.

On 24 March 2011 the shareholder group announced that it would continue the shareholder pooling agreement existing since 1948 with a modified shareholder composition. A charitable foundation established by pool members has been admitted to the pool. The pool now consists of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Mr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder group with pooled voting rights now holds 72,018,000 shares, corresponding to 45.01% of the shares issued. This figure does not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, holds now 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

Mr André Hoffmann and Dr Andreas Oeri are members of the Board of Directors of Roche Holding Ltd. Mr Hoffmann received remuneration totalling 400,000 Swiss francs (2010: 400,000 Swiss francs) and Dr Oeri received remuneration totalling 360,000 Swiss francs (2010: 360,000 Swiss francs).

There were no other transactions between the Group and the individual members of the above shareholder group.

Subsidiaries and associates

A listing of the major Group subsidiaries and associates is included in Note 33. Transactions between the parent company and its subsidiaries and between subsidiaries are eliminated on consolidation. There were no significant transactions between the Group and its associates.

Key management personnel

Total remuneration of key management personnel was 61 million Swiss francs (2010: 57 million Swiss francs, 2009: 81 million Swiss francs).

Members of the Board of Directors of Roche Holding Ltd receive an annual remuneration and payment for their time and expenses related to their membership of Board committees. Total remuneration of the Board of Directors, excluding the Chairman, in 2011 totalled 5 million Swiss francs (2010: 5 million Swiss francs, 2009: 4 million Swiss francs).

The Chairman of the Board of Directors and members of the Corporate Executive Committee of Roche Holding Ltd receive remuneration, which consists of an annual salary, bonus and an expense allowance. The Group pays social insurance contributions in respect of the above remuneration and pays contributions to pension and other post-employment benefit plans for the Chairman of the Board of Directors and members of the Corporate Executive Committee. The Chairman of the Board of Directors and members of the Corporate Executive Committee also participate in certain equity compensation plans as described below. The terms, vesting conditions and fair value of these awards are disclosed in Note 10. New members of the Corporate Executive Committee (Dr Hippe in 2011, Mr O'Day in 2010 and Dr Soriot in 2009) are included in the table below for the full calendar year in which they joined the CEC. Similarly, members of the Corporate Executive Committee retiring part way through the year (Dr Hunziker in 2011) are included for the full calendar year in which they left the CEC.

Remuneration of the Chairman of the Board of Directors and members of the Corporate Executive Committee in millions of CHF

	2011	2010	2009
Salaries, including bonuses and expenses	24	30	38
Bonus/Special Stock Awards	5	–	14
Social security costs	2	2	3
Pensions and other post-employment benefits	7	6	5
Equity compensation plans	13	13	16
Retirement awards	4	–	–
Other employee benefits	1	1	1
Total	**56**	**52**	**77**

For the purposes of these remuneration disclosures the values for equity compensation plans, including the Bonus and Special Stock Awards, are calculated based on the fair value used in Note 10. These represent the cost to the Group of such awards at grant date and reflect, amongst other matters, the observed exercise behaviour and exit rate for the whole population that receive the awards and initial simulations of any performance conditions.

The detailed disclosures regarding executive remuneration that are required by Swiss law which are included in the financial statements of Roche Holding Ltd, Basel, on pages 159 to 164. In those disclosures the values for equity compensation plans, including the Special Stock Awards, represent the fair value that the employee receives taking into account the preliminary assessment of any completed performance conditions. These fair values are shown in the table below, which reconciles those disclosures required by Swiss law to the above related party disclosures for key management personnel.

Reconciliation to executive remuneration disclosures required by Swiss law in millions of CHF

	2011	2010	2009
Total remuneration of the Chairman of the Board of Directors and members of Corporate Executive Committee (IFRS basis – see table above)	56	52	77
Deduct			
– Bonus/Special Stock Awards (IFRS basis)	(5)	–	(14)
– Equity compensation plans (IFRS basis)	(13)	(13)	(16)
Add back			
– Bonus/Special Stock Awards (Swiss legal basis)	4	–	9
– Equity compensation plans (Swiss legal basis)	11	12	16
Total remuneration of the Chairman of the Board of Directors and members of Corporate Executive Committee (Swiss legal basis)	**53**	**51**	**72**
Of which			
– Chairman of the Board of Directors (page 159)	9	11	15
– Members of the Corporate Executive Committee (page 160)	44	40	57

Bonus/Special Stock Awards. During 2011 members of the Corporate Executive Committee were granted 32,342 Bonus Stock Awards in lieu of part of their cash-settled bonus for the financial year 2011 (2010: none, 2009: 96,750 Special Stock Awards).

Roche Long-Term. During 2011 members of the Corporate Executive Committee were granted 572,121 Stock-settled Stock Appreciation Rights (S-SARs) and no Roche Option Plan (ROP) or Restricted Stock Unit (RSU) awards (2010: 451,755 S-SARs and no ROP or RSU awards).

Roche Connect. During 2011 contributions paid by the Group with respect to the Chairman of the Board of Directors and members of the Corporate Executive Committee totalled 0.3 million Swiss francs (2010: 0.3 million Swiss francs).

Roche Performance Share Plan. During 2011 members of the Corporate Executive Committee were targeted with 25,778 awards of the 2011–2013 cycle (2010: 20,568 awards from the 2010–2012 cycle). Each award will result in between zero and two non-voting equity securities, depending upon the achievement of the performance targets.

Transactions with former members of the Corporate Executive Committee. Pensions and tax consulting services totalling 2 million Swiss francs were paid by the Group to two former Corporate Executive Committee members (2010: 2 million Swiss francs to four former members).

Post-employment benefit plans

Transactions between the Group and the various post-employment defined benefit plans for the employees of the Group are described in Note 9.

33. Subsidiaries and associates

Divestment of subsidiaries

Effective 31 May 2011 the Group sold its wholly owned subsidiary Roche Vitamins, Inc. (RVI) to a third party. In addition, as disclosed in Note 7, during 2011 the Group completed the sale of the following wholly-owned subsidiaries in connection with the Operational Excellence programme:

- Roche Colorado Corporation, in Boulder, Colorado.
- Roche Madison Inc., in Madison, Wisconsin.
- Roche Kulmbach GmbH, in Kulmbach, Germany.
- Lascona Land Company, Inc., Philippines.

The total consideration received from these divestments was 18 million Swiss francs. This consisted of 6 million Swiss francs in cash, marketable securities with a fair value of 4 million Swiss francs and deferred cash consideration of 8 million Swiss francs that will be received in 2012.

The total gain (loss) on these divestments is shown in the table below.

Gain (loss) on divestment of subsidiaries in millions of CHF

	2011
Consideration	18
Net assets disposed	
– Property, plant and equipment [11]	9
– Goodwill [12]	72
– Provisions [24]	(4)
– Cash	16
– Other net assets	(5)
– Accumulated currency translation adjustments [27]	20
Total net assets disposed	**108**
Transaction costs and provisions and accruals for residual obligations retained by the Roche Group	(11)
Gain (loss) on divestment	**(101)**
Reported as	
– Global restructuring costs – Roche Pharmaceuticals operating segment [7]	(105)
– General and administration costs – Corporate operating segment	4

Listed companies

Country	Company	City	Share capital (in millions)		Equity interest (in %)
Switzerland	Roche Holding Ltd Stock Exchange: SIX Swiss Exchange Zurich Valor Share: 1203211 Valor *Genussschein*: 1203204 ISIN Share: CH0012032113 ISIN *Genussschein:* CH0012032048 Market Capitalisation: CHF 136,102.4 m	Basel	CHF	160.0	
Japan	Chugai Pharmaceutical Co., Ltd. Stock Exchange: Tokyo ISIN: JP3519400000 Market Capitalisation: JPY 690,579.4 m	Tokyo	JPY	335.2	61.6

Non-listed companies

Country	Company	City	Share capital (in millions)		Equity interest (in %)
Argentina	Productos Roche S.A. Química e Industrial	Buenos Aires	ARS	163.5	100
Australia	Roche Diagnostics Australia Pty. Limited	Castle Hill	AUD	5.0	100
	Roche Products Pty. Limited	Dee Why	AUD	65.0	100
Austria	Roche Austria GmbH	Vienna	EUR	14.5	100
	Roche Diagnostics GmbH	Vienna	EUR	1.1	100
	Roche Diagnostics Graz GmbH	Graz	EUR	0.4	100
Belgium	N.V. Roche S.A.	Brussels	EUR	32.0	100
	Roche Diagnostics Belgium S.A.	Brussels	EUR	3.8	100
Bermuda	Chemical Manufacturing and Trading Company Limited	Hamilton	USD	(–)	100
	Roche Capital Services Ltd.	Hamilton	RUB	(–)	100
	Roche Catalyst Investments Ltd.	Hamilton	USD	(–)	100
	Roche Financial Investments Ltd.	Hamilton	USD	(–)	100
	Roche Financial Management Ltd.	Hamilton	USD	(–)	100
	Roche Financial Services Ltd.	Hamilton	USD	(–)	100
	Roche International Ltd.	Hamilton	USD	(–)	100
	Roche Intertrade Limited	Hamilton	USD	10.0	100
	Roche Operations Ltd.	Hamilton	USD	(–)	100
	Roche Services Holdings Ltd.	Hamilton	USD	(–)	100
	Syntex Pharmaceuticals International Ltd.	Hamilton	USD	(–)	100
Bosnia-Herzegovina	Roche Ltd. Pharmaceutical Company	Sarajevo	BAM	1.1	100
Brazil	Produtos Roche Químicos e Farmacêuticos S.A.	São Paulo	BRL	41.7	100
	Roche Diagnostica Brasil Ltda.	São Paulo	BRL	412.6	100
Bulgaria	Roche Bulgaria EOOD	Sofia	BGN	5.1	100
Canada	Chempharm Limited	Toronto	CAD	(–)	100
	Hoffmann-La Roche Limited	Toronto	CAD	40.3	100
	Sapac Corporation Ltd.	St. John	CAD	(–)	100
Chile	Roche Chile Limitada	Santiago de Chile	CLP	70.9	100
China	Roche (China) Holding	Shanghai	USD	37.0	100
	Roche Diagnostics (Hong Kong) Limited	Hong Kong	HKD	10.0	100
	Roche Diagnostics (Shanghai) Limited	Shanghai	USD	1.0	100
	Roche Hong Kong Limited	Hong Kong	HKD	10.0	100
	Roche R&D Center (China) Ltd.	Shanghai	USD	6.3	100
	Shanghai Roche Pharmaceuticals Limited	Shanghai	USD	62.4	70
Colombia	Productos Roche S.A.	Bogotá	COP	26,923.7	100
Costa Rica	Roche Servicios S.A.	Heredia	USD	(–)	100
Croatia	Roche d.o.o.	Zagreb	HRK	4.8	100
Czech Republic	Roche s.r.o.	Prague	CZK	200.0	100
Denmark	Roche a/s	Hvidovre	DKK	4.0	100
	Roche Diagnostics a/s	Hvidovre	DKK	1.3	100
Dominican Republic	Productos Roche Dominicana S.A.	Santo Domingo	DOP	0.6	100
Ecuador	Roche Ecuador S.A.	Quito	USD	1.1	100

Country	Company	City	Share capital (in millions)		Equity interest (in %)
El Salvador	Productos Roche (El Salvador) S.A.	San Salvador	SVC	0.2	100
Estonia	Roche Eesti OÜ	Tallinn	EUR	0.1	100
Finland	Roche Diagnostics Oy	Espoo	EUR	0.2	100
	Roche Oy	Espoo	EUR	(–)	100
France	Roche Diagnostics France S.A.S.	Meylan	EUR	16.0	100
	Roche S.A.S.	Boulogne-Billancourt cedex	EUR	38.2	100
	Ventana Medical Systems S.A.	Illkirch	EUR	0.9	100
Germany	Galenus Mannheim GmbH	Mannheim	EUR	1.7	100
	NimbleGen Systems GmbH	Pleiskirchen	EUR	(–)	100
	Roche Beteiligungs GmbH	Grenzach-Wyhlen	EUR	3.6	100
	Roche Deutschland Holding GmbH	Grenzach-Wyhlen	DEM	10.0	100
	Roche Diagnostics Deutschland GmbH	Mannheim	EUR	1.0	100
	Roche Diagnostics GmbH	Mannheim	EUR	94.6	100
	Roche mtm laboratories AG	Heidelberg	EUR	1.4	100
	Roche Pharma AG	Grenzach-Wyhlen	EUR	61.4	100
	Roche PVT GmbH	Waiblingen	EUR	(–)	100
	Swisslab GmbH	Berlin	EUR	(–)	100
Greece	Roche (Hellas) S.A.	Athens	EUR	20.1	100
	Roche Diagnostics (Hellas) S.A.	Athens	EUR	48.7	100
Guatemala	Productos Roche Guatemala S.A.	Guatemala	GTQ	0.6	100
Honduras	Productos Roche (Honduras), S.A.	Tegucigalpa	HNL	(–)	100
Hungary	Roche (Hungary) Ltd.	Budapest	HUF	30.0	100
	Roche Services (Europe) Ltd.	Budapest	HUF	3.0	100
India	Roche Diagnostics (India) Pvt. Ltd.	Mumbai	INR	149.2	100
	Roche Products (India) Pvt. Ltd.	Mumbai	INR	10.0	100
Indonesia	P.T. Roche Indonesia	Jakarta	IDR	1,323.0	98.3
Ireland	Roche Ireland Limited	Clarecastle	EUR	1.9	100
	Roche Products (Ireland) Limited	Dublin	EUR	(–)	100
Israel	Medingo Ltd.	Yoqneam Illit	ILS	8.0	100
	Roche Pharmaceuticals (Israel) Ltd.	Petach Tikva	ILS	(–)	100
Italy	Roche Diagnostics S.p.A.	Milan	EUR	18.1	100
	Roche S.p.A.	Milan	EUR	34.1	100
Japan	Roche Diagnostics K.K.	Tokyo	JPY	2,500.0	100
Latvia	Roche Latvija SIA	Riga	LVL	0.2	100
Lithuania	UAB Roche Lietuva	Vilnius	LIT	0.8	100
Malaysia	Roche (Malaysia) Sdn Bhd.	Kuala Lumpur	MYR	4.0	100
	Roche Diagnostics (Malaysia) Sdn Bhd.	Kuala Lumpur	MYR	0.9	100
Mexico	Productos Roche, S.A. de C.V.	Mexico City	MXN	82.6	100
	Roche Servicios de México, S.A. de C.V.	Mexico City	MXN	3.5	100
Morocco	Roche S.A.	Casablanca	MAD	59.5	100
Netherlands	Roche Diagnostics Nederland B.V.	Almere	EUR	2.3	100
	Roche Finance Europe B.V.	Woerden	EUR	2.0	100
	Roche Nederland B.V.	Woerden	EUR	10.9	100
	Roche Pharmholding B.V.	Woerden	EUR	467.8	100
New Zealand	Roche Diagnostics NZ Limited	Auckland	NZD	3.0	100
	Roche Products (New Zealand) Limited	Auckland	NZD	13.5	100
Nicaragua	Productos Roche (Nicaragua) S.A.	Managua	NIO	(–)	100
Norway	Roche Diagnostics Norge A/S	Oslo	NOK	5.8	100
	Roche Norge A/S	Oslo	NOK	6.2	100
Pakistan	Roche Pakistan Limited	Karachi	PKR	38.3	100
Panama	Productos Roche (Panamá) S.A.	Panama City	PAB	(–)	100
	Productos Roche Interamericana S.A.	Panama City	USD	0.1	100
	Roche Products Inc.	Panama City	USD	0.5	100
	Syntex Puerto Rico Inc.	Panama City	USD	(–)	100
	Technical Development Corp.	Panama City	CHF	0.8	100

Country	Company	City		Share capital (in millions)	Equity interest (in %)
Peru	Productos Roche Química Farmacéutica S.A.	Lima	PEN	11.1	100
Philippines	Roche (Philippines) Inc.	Taguig City	PHP	300.0	100
Poland	Roche Diagnostics Polska Sp. z o.o.	Warsaw	PLN	8.0	100
	Roche Polska Sp. z o.o.	Warsaw	PLN	25.0	100
Portugal	Roche Farmacêutica Química, Lda.	Amadora	EUR	1.1	100
	Roche Sistemas de Diagnósticos, Sociedade Unipessoal, Lda.	Amadora	EUR	2.6	100
Puerto Rico	Roche Operations Ltd.	Ponce	USD	(–)	100
Romania	Roche Romania S.R.L.	Bucharest	RON	472.1	100
Russian Federation	Limited Liability Company Roche Diagnostics Rus	Moscow	RUB	250.0	100
	Roche – Moscow Ltd.	Moscow	RUB	2.6	100
Serbia	Roche d.o.o. Beograd	Belgrade	EUR	4.1	100
Singapore	Roche Diagnostics Asia Pacific Pte. Ltd.	Singapore	SGD	20.4	100
	Roche Singapore Pte. Ltd.	Singapore	SGD	4.0	100
	Roche Singapore Technical Operations, Pte. Ltd.	Singapore	USD	795.0	100
Slovakia	Roche Slovensko, S.R.O.	Bratislava	EUR	0.3	100
Slovenia	Roche d.o.o. Pharmaceutical Company	Ljubljana	EUR	0.2	100
South Africa	Roche Products (Proprietary) Limited	Illovo	ZAR	60.0	100
South Korea	Roche Diagnostics Korea Co., Ltd.	Seoul	KRW	22,969.0	100
	Roche Korea Company Ltd.	Seoul	KRW	13,375.0	100
Spain	Andreu Roche S.A.	Madrid	EUR	0.1	100
	Roche Diagnostics S.L.	Barcelona	EUR	18.0	100
	Roche Farma S.A.	Madrid	EUR	54.1	100
	Syntex Roche S.A.	Madrid	EUR	0.1	100
Sweden	Roche AB	Stockholm	SEK	20.0	100
	Roche Diagnostics Scandinavia AB	Bromma	SEK	9.0	100
Switzerland	Disetronic Handels AG	Burgdorf	CHF	0.1	100
	Disetronic Holding AG	Burgdorf	CHF	0.2	100
	F. Hoffmann-La Roche Ltd	Basel	CHF	150.0	100
	Hoffmann-La Roche Ltd.	Basel	CHF	0.5	100
	Rabbit-Air Ltd.	Bachenbülach	CHF	3.0	100
	Roche Capital Market Ltd.	Basel	CHF	1.0	100
	Roche Diabetes Care AG	Burgdorf	CHF	0.9	100
	Roche Diagnostics (Switzerland) Ltd.	Rotkreuz	CHF	1.0	100
	Roche Diagnostics AG	Rotkreuz	CHF	5.0	100
	Roche Diagnostics International Ltd.	Steinhausen	CHF	20.0	100
	Roche Finance Ltd.	Basel	CHF	409.2	100
	Roche Glycart AG	Schlieren	CHF	0.3	100
	Roche Long Term Foundation	Basel	CHF	0.5	100
	Roche Pharma (Switzerland) Ltd.	Reinach	CHF	2.0	100
Taiwan	Roche Diagnostics Ltd.	Taipei	TWD	80.0	100
	Roche Products Ltd.	Taipei	TWD	100.0	100
Thailand	Roche Diagnostics (Thailand) Limited	Bangkok	THB	103.0	100
	Roche Thailand Limited	Bangkok	THB	12.0	100
Turkey	Roche Diagnostik Sistemleri Ticaret A.S.	Istanbul	TRY	80.0	100
	Roche Müstahzarlari Sanayi Anonim Sirketi	Istanbul	TRY	249.5	100
Ukraine	Roche Ukraine LLC	Kiev	USD	0.5	100
United Kingdom	Piramed Limited	Welwyn Garden City	GBP	(–)	100
	Roche Diagnostics Ltd.	Burgess Hill	GBP	32.6	100
	Roche Holding (UK) Limited	Welwyn Garden City	GBP	100.0	100
	Roche Products Limited	Welwyn Garden City	GBP	98.3	100
	Roche Registration Limited	Welwyn Garden City	GBP	(–)	100

Country	Company	City	Share capital (in millions)		Equity interest (in %)
United States	454 Life Sciences Corporation	Branford	USD	(–)	100
	Alios Biopharma, Inc.	South San Francisco	USD	(–)	22
	Anadys Pharmaceuticals, Inc.	San Diego	USD	(–)	100
	BioVeris Corporation	Wilmington	USD	(–)	100
	Genentech, Inc.	South San Francisco	USD	(–)	100
	Genentech USA, Inc.	South San Francisco	USD	(–)	100
	Hoffmann-La Roche Inc.	Nutley	USD	3.0	100
	Idaho Technology Inc.	Salt Lake City	USD	(–)	22.9
	IGEN International, Inc.	Wilmington	USD	(–)	100
	Marcadia Biotech, Inc.	Wilmington	USD	(–)	100
	Memory Pharmaceuticals Corp.	Montvale	USD	(–)	100
	Roche Carolina Inc.	Florence	USD	(–)	100
	Roche Diagnostics Corporation	Indianapolis	USD	(–)	100
	Roche Diagnostics Operations, Inc.	Indianapolis	USD	(–)	100
	Roche Holdings, Inc.	Wilmington	USD	1.0	100
	Roche Insulin Delivery Systems Inc.	Fishers	USD	(–)	100
	Roche Laboratories Inc.	Nutley	USD	(–)	100
	Roche Molecular Systems, Inc.	Pleasanton	USD	(–)	100
	Roche NimbleGen, Inc.	Madison	USD	(–)	100
	Roche Palo Alto LLC	South San Francisco	USD	(–)	100
	Spring Bioscience Corp.	Fremont	USD	(–)	100
	Therapeutic Human Polyclonals, Inc.	South San Francisco	USD	(–)	100
	Ventana Medical Systems, Inc.	Tucson	USD	(–)	100
Uruguay	Roche International Ltd. – Montevideo Branch	Hamilton	UYU	(–)	100
Venezuela	Productos Roche S.A.	Caracas	VEF	78.2	100
Vietnam	Roche Diagnostics Vietnam Co., Ltd.	Ho Chi Minh City	USD	3.0	100

(–) = share capital of less than 100,000 local currency units.

Report of Roche Management on Internal Control over Financial Reporting

Report of Roche Management on Internal Control over Financial Reporting

The Board of Directors and management of Roche Holding Ltd are responsible for establishing and maintaining adequate control over financial reporting. The internal control system was designed to provide reasonable assurance over the reliability of financial reporting and the preparation and fair presentation of consolidated financial statements in accordance with International Financial Reporting Standards.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of its system of internal control over financial reporting as of 31 December 2011 based on the criteria for effective internal control over financial reporting described in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has concluded that the system of internal control over financial reporting was effective as of 31 December 2011.

The Statutory Auditor KPMG AG have audited the consolidated financial statements of Roche Holding Ltd for the year ended 31 December 2011, in accordance with Swiss Auditing Standards and with the International Standards on Auditing (ISA). They have also issued a report on the effectiveness of the Group's system of internal control over financial reporting. This report is set out on pages 140 to 141.

Franz B. Humer
Chairman of the Board of Directors

Alan Hippe
Chief Financial Officer

Basel, 24 January 2012

Report of the Statutory Auditor on the Consolidated Financial Statements

Report of the Statutory Auditor on the Consolidated Financial Statements to the Annual General Meeting of Roche Holding Ltd, Basel

As statutory auditor, we have audited the accompanying consolidated financial statements of Roche Holding Ltd, which comprise the income statement, statement of comprehensive income, balance sheet, statement of cash flows, statement of changes in equity and notes on pages 42 to 136 for the year ended 31 December 2011.

Board of Directors' Responsibility. The Board of Directors is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law, Swiss Auditing Standards and International Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion. In our opinion, the consolidated financial statements for the year ended 31 December 2011 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with International Financial Reporting Standards (IFRS), and comply with Swiss law.

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG

KPMG AG

Ian Starkey	François Rouiller
Licensed Audit Expert	Licensed Audit Expert
Auditor in Charge	

Basel, 24 January 2012

Report of the Independent Auditor on Internal Control over Financial Reporting

Report of the Independent Auditor on Internal Control over Financial Reporting to the Annual General Meeting of Roche Holding Ltd, Basel

We have examined the Roche Group's system of internal control over financial reporting as of 31 December 2011, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

The Board of Directors and management of Roche Holding Ltd are responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting as included in the accompanying Report of Roche Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our examination. An entity's internal control over financial reporting is a process effected by the entity's Board of Directors, management, and other personnel, designed to provide reasonable assurance regarding the reliability of financial statements prepared in accordance with International Financial Reporting Standards (IFRS) and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the entity; (2) provide reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in accordance with the applicable financial reporting framework; and (3) provide reasonable assurance regarding the prevention or timely detection of the unauthorised acquisition, use, or disposition of the entity's assets that could have a material effect on the entity's financial statements.

We conducted our examination in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000). This standard requires that we plan and perform our examination to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our examination included obtaining an understanding of internal control over financial reporting, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of the inherent limitations of internal control over financial reporting, including the possibility of management override of controls, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of internal control over financial reporting to future periods are subject to the risk that internal control may become inadequate because of changes in conditions or because the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Roche Group maintained, in all material respects, effective internal control over financial reporting as of 31 December 2011 based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with Swiss Auditing Standards and International Standards on Auditing, the consolidated financial statements of Roche Holding Ltd for the year ended 31 December 2011 and our report dated 24 January 2012 expressed an unqualified opinion on those consolidated financial statements.

KPMG

KPMG AG

Ian Starkey	François Rouiller

Basel, 24 January 2012

Multi-Year Overview and Supplementary Information

Multi-Year Overview

Statistics, as reported

	2002	2003	2004
Statement of income in millions of CHF			
Sales	29,453	31,220	31,273
EBITDA	7,993	8,609	9,566
Operating profit	1,335	5,592	8,979
Net income attributable to Roche shareholders	(4,026)	3,069	6,641
Research and development	4,257	4,766	5,093
Balance sheet in millions of CHF			
Non-current assets	33,143	29,820	28,670
Current assets	30,852	29,666	29,406
Total assets	63,995	59,486	58,076
Non-current liabilities	(22,850)	(18,658)	(14,882)
Current liabilities	(15,372)	(11,664)	(9,901)
Total liabilities	(38,222)	(30,322)	(24,783)
Net assets	25,773	29,164	33,293
Capital and reserves attributable to Roche shareholders	20,810	23,570	28,223
Equity attributable to non-controlling interests	4,963	5,594	5,070
Additions to property, plant and equipment	2,044	2,265	2,357
Personnel			
Number of employees at end of year	69,659	65,357	64,703
Key ratios			
Net income attributable to Roche shareholders as % of sales	–14	10	21
Net income as % of equity, attributable to Roche shareholders	–19	13	24
Research and development as % of sales	14	15	16
Current ratio %	201	254	297
Equity and non-controlling interests as % of total assets	40	49	57
Sales per employee in thousands of CHF	427	482	483
Data on shares and non-voting equity securities			
Number of shares	160,000,000	160,000,000	160,000,000
Number of non-voting equity securities *(Genussscheine)*	702,562,700	702,562,700	702,562,700
Total shares and non-voting equity securities	862,562,700	862,562,700	862,562,700
Total dividend in millions of CHF	1,251	1,423	1,725
Earnings per share and non-voting equity security (diluted) in CHF	(4.80)	3.61	7.81
Dividend per share and non-voting equity security in CHF	1.45	1.65	2.00

Information in this table is stated as reported. Changes in accounting policies arising from changes in International Financial Reporting Standards are not applied retrospectively.

2005	2006	2007	2008	2009	2010	2011
35,511	42,041	46,133	45,617	49,051	47,473	42,531
11,404	14,436	17,068	16,637	18,028	18,517	16,933
8,669	11,730	14,468	13,924	12,277	13,486	13,454
5,787	7,880	9,761	8,969	7,784	8,666	9,343
5,705	6,589	8,385	8,845	9,874	10,026	8,326
33,739	33,519	35,349	37,485	36,086	33,408	33,344
35,626	40,895	42,834	38,604	38,479	27,612	28,232
69,365	74,414	78,183	76,089	74,565	61,020	61,576
(18,130)	(14,908)	(10,422)	(10,163)	(43,084)	(34,380)	(30,884)
(9,492)	(12,692)	(14,454)	(12,104)	(22,067)	(14,978)	(16,210)
(27,622)	(27,600)	(24,876)	(22,267)	(65,151)	(49,358)	(47,094)
41,743	46,814	53,307	53,822	9,414	11,662	14,482
34,922	39,444	45,347	44,479	7,366	9,469	12,095
6,821	7,370	7,960	9,343	2,048	2,193	2,387
3,428	3,878	3,648	3,187	2,837	2,633	2,006
68,218	74,372	78,604	80,080	81,507	80,653	80,129
16	19	21	20	16	18	22
17	20	22	20	106	92	77
16	16	18	19	20	21	20
375	322	296	319	174	184	174
60	63	68	71	13	19	24
521	565	587	570	602	589	531
160,000,000	160,000,000	160,000,000	160,000,000	160,000,000	160,000,000	160,000,000
702,562,700	702,562,700	702,562,700	702,562,700	702,562,700	702,562,700	702,562,700
862,562,700	862,562,700	862,562,700	862,562,700	862,562,700	862,562,700	862,562,700
2,156	2,933	3,968	4,313	5,175	5,693	5,865[a]
6.71	9.05	11.16	10.23	9.02	10.11	10.98
2.50	3.40	4.60	5.00	6.00	6.60	6.80[a]

a) Dividend 2011 as proposed by the Board of Directors.

Sales by division in millions of CHF

	2007	2008	2009	2010	2011
Pharmaceuticals	36,783	35,961	38,996	37,058	32,794
Diagnostics	9,350	9,656	10,055	10,415	9,737
Total	**46,133**	**45,617**	**49,051**	**47,473**	**42,531**

Sales by geographical area in millions of CHF

	2007	2008	2009	2010	2011
Switzerland	489	509	499	464	507
European Union	15,465	15,601	16,219	14,596	12,815
– *of which Germany*	*3,277*	*3,200*	*3,320*	*2,970*	*2,595*
Rest of Europe	1,620	1,521	1,568	1,630	1,486
Europe	**17,574**	**17,631**	**18,286**	**16,690**	**14,808**
United States	17,069	16,362	17,208	16,446	14,133
Rest of North America	1,004	932	948	1,051	1,047
North America	**18,073**	**17,294**	**18,156**	**17,497**	**15,180**
Latin America	2,784	2,975	2,940	3,397	3,115
Japan	3,562	3,532	5,036	4,718	4,314
Rest of Asia	2,681	2,920	3,166	3,591	3,616
Asia	**6,243**	**6,452**	**8,202**	**8,309**	**7,930**
Africa, Australia and Oceania	1,459	1,265	1,467	1,580	1,498
Total	**46,133**	**45,617**	**49,051**	**47,473**	**42,531**

Additions to property, plant and equipment by division in millions of CHF

	2007	2008	2009	2010	2011
Pharmaceuticals	2,588	1,940	1,644	1,464	1,049
Diagnostics	1,058	1,245	1,191	1,150	956
Corporate	2	2	2	49	1
Total	**3,648**	**3,187**	**2,837**	**2,663**	**2,006**

Additions to property, plant and equipment by geographical area in millions of CHF

	2007	2008	2009	2010	2011
Switzerland	418	421	315	413	381
European Union	993	960	972	890	679
– *of which Germany*	*660*	*591*	*646*	*577*	*352*
Rest of Europe	30	17	20	21	26
Europe	**1,441**	**1,398**	**1,307**	**1,324**	**1,086**
United States	1,679	1,212	866	658	401
Rest of North America	34	21	13	24	5
North America	**1,713**	**1,233**	**879**	**682**	**406**
Latin America	133	127	115	127	115
Japan	230	292	230	242	185
Rest of Asia	103	116	285	254	194
Asia	**333**	**408**	**515**	**496**	**379**
Africa, Australia and Oceania	28	21	21	34	20
Total	**3,648**	**3,187**	**2,837**	**2,663**	**2,006**

Core Results and EPS Information

The Group's basic and diluted earnings per share information is given in Note 28 to the Consolidated Financial Statements on pages 118 to 119. The Group has expanded the presentation of its core results in 2010. Previously only core EPS was shown, but now the full income statement for the Group and the operating results of the divisions are shown on both an IFRS and core basis. This allows a transparent assessment of both the actual results and the underlying performance of the business.

The core results concept, which is used in the internal management of the business, is based on the IFRS results, with the following adjustments:

- Global restructuring costs (see Note 7) are excluded.
- Amortisation and impairment of intangible assets (see Note 13) are excluded.
- Acquisition accounting and other one-time impacts from Alliance arrangements and Business Combinations (see Financial Review) are excluded.
- Discontinued operations (currently none) would be excluded.
- Legal and environmental expenses (see Financial Review) are excluded.
- Global issues outside the healthcare sector beyond the Group's control are excluded. In 2011 this includes the directly attributable costs of the earthquake that occurred in Japan on 11 March 2011 (see Note 3). There were no such items in 2010.
- Material one-time treasury items such as major debt restructurings or settlement of pension plans (both currently none) would be excluded.
- The tax benefit recorded under IFRS in respect of Equity Compensation Plans (ECPs), which varies according to price of the underlying equity, is replaced by a normalised tax benefit, being the IFRS 2 expense multiplied by the applicable tax rate (see Note 5).

The core results concept was further described on 22 October 2010 at an Investor Update teleconference, which is available for download at: http://www.roche.com/investors/ir_agenda/csr_151010.htm

The Group's IFRS results, including the divisional breakdown, are reconciled to the core results in the tables below. The calculation of core EPS is also given in the tables below. To avoid double-counting, amounts shown for 'Global Restructuring' below exclude items in 2010 from the Operational Excellence programme that are included in the other adjustment columns: these are impairment of intangible assets totalling 424 million Swiss francs (see Note 7). Additional commentary to the adjustment items is given in the Financial Review.

Core results reconciliation – 2011 in millions of CHF

	IFRS	Global restruc-turing	Intangibles amorti-sation	Intangibles impairment	Alliances & business combi-nations	Legal & environ-mental	Global issues	Normali-sation of ECP tax benefit	Core
Sales	42,531	–	–	–	–	–	–	–	42,531
Royalties and other operating income	1,582	–	–	–	–	–	–	–	1,582
Cost of sales	(11,942)	194	498	86	–	–	47	–	(11,117)
Marketing and distribution	(8,049)	70	5	–	–	–	7	–	(7,967)
Research and development	(8,326)	184	17	52	–	–	–	–	(8,073)
General and administration	(2,342)	492	–	–	(42)	82	3	–	(1,807)
Operating profit	**13,454**	**940**	**520**	**138**	**(42)**	**82**	**57**	**–**	**15,149**
Associates	12	–	–	–	–	–	–	–	12
Financial income	647	–	–	–	–	–	–	–	647
Financing costs	(2,228)	–	–	–	–	–	–	–	(2,228)
Profit before taxes	**11,885**	**940**	**520**	**138**	**(42)**	**82**	**57**	**–**	**13,580**
Income taxes	(2,341)	(268)	(181)	(41)	(2)	(30)	(24)	(8)	(2,895)
Net income	**9,544**	**672**	**339**	**97**	**(44)**	**52**	**33**	**(8)**	**10,685**
Attributable to									
– Roche shareholders	9,343	672	339	97	(44)	51	20	(8)	10,470
– Non-controlling interests	201	–	–	–	–	1	13	–	215

Core results reconciliation – 2010 in millions of CHF

	IFRS	Global restruc-turing	Intangibles amorti-sation	Intangibles impairment	Alliances & business combi-nations	Legal & environ-mental	Normali-sation of ECP tax benefit	Core
Sales	47,473	–	–	–	–	–	–	47,473
Royalties and other operating income	1,694	–	–	–	–	–	–	1,694
Cost of sales	(13,293)	157	592	33	–	–	–	(12,511)
Marketing and distribution	(9,488)	317	4	–	–	–	–	(9,167)
Research and development	(10,026)	319	23	634	–	–	–	(9,050)
General and administration	(2,874)	722	–	–	5	299	–	(1,848)
Operating profit	**13,486**	**1,515**	**619**	**667**	**5**	**299**	**–**	**16,591**
Associates	(3)	–	–	–	–	–	–	(3)
Financial income	557	–	–	–	–	–	–	557
Financing costs	(2,829)	–	–	–	–	–	–	(2,829)
Profit before taxes	**11,211**	**1,515**	**619**	**667**	**5**	**299**	**–**	**14,316**
Income taxes	(2,320)	(398)	(207)	(185)	(1)	(107)	83	(3,135)
Net income	**8,891**	**1,117**	**412**	**482**	**4**	**192**	**83**	**11,181**
Attributable to								
– Roche shareholders	8,666	1,117	412	482	4	191	83	10,955
– Non-controlling interests	225	–	–	–	–	1	–	226

Divisional core results reconciliation – 2011 in millions of CHF

	IFRS	Global restruc-turing	Intangibles amorti-sation	Intangibles impairment	Alliances & business combi-nations	Legal & environ-mental	Global issues	Core
Pharmaceuticals								
Sales	32,794	–	–	–	–	–	–	32,794
Royalties and other operating income	1,453	–	–	–	–	–	–	1,453
Cost of sales	(7,436)	167	137	32	–	–	47	(7,053)
Marketing and distribution	(5,636)	65	–	–	–	–	7	(5,564)
Research and development	(7,397)	162	15	47	–	–	–	(7,173)
General and administration	(1,527)	456	–	–	(39)	56	3	(1,051)
Operating profit	**12,251**	**850**	**152**	**79**	**(39)**	**56**	**57**	**13,406**
Diagnostics								
Sales	9,737	–	–	–	–	–	–	9,737
Royalties and other operating income	129	–	–	–	–	–	–	129
Cost of sales	(4,506)	27	361	54	–	–	–	(4,064)
Marketing and distribution	(2,413)	5	5	–	–	–	–	(2,403)
Research and development	(929)	22	2	5	–	–	–	(900)
General and administration	(362)	18	–	–	(3)	26	–	(321)
Operating profit	**1,656**	**72**	**368**	**59**	**(3)**	**26**	**–**	**2,178**
Corporate								
General and administration	(453)	18	–	–	–	–	–	(435)
Operating profit	**(453)**	**18**	**–**	**–**	**–**	**–**	**–**	**(435)**

Divisional core results reconciliation – 2010 in millions of CHF

	IFRS	Global restruc-turing	Intangibles amorti-sation	Intangibles impairment	Alliances & business combi-nations	Legal & environ-mental	Core
Pharmaceuticals							
Sales	37,058	–	–	–	–	–	37,058
Royalties and other operating income	1,537	–	–	–	–	–	1,537
Cost of sales	(8,169)	66	156	–	–	–	(7,947)
Marketing and distribution	(6,964)	312	–	–	–	–	(6,652)
Research and development	(9,090)	277	19	634	–	–	(8,160)
General and administration	(2,071)	709	–	–	1	301	(1,060)
Operating profit	**12,301**	**1,364**	**175**	**634**	**1**	**301**	**14,776**
Diagnostics							
Sales	10,415	–	–	–	–	–	10,415
Royalties and other operating income	157	–	–	–	–	–	157
Cost of sales	(5,124)	91	436	33	–	–	(4,564)
Marketing and distribution	(2,524)	5	4	–	–	–	(2,515)
Research and development	(936)	42	4	–	–	–	(890)
General and administration	(409)	6	–	–	4	(2)	(401)
Operating profit	**1,579**	**144**	**444**	**33**	**4**	**(2)**	**2,202**
Corporate							
General and administration	(394)	7	–	–	–	–	(387)
Operating profit	**(394)**	**7**	**–**	**–**	**–**	**–**	**(387)**

Core EPS

	2011	2010
Core net income (CHF millions)		
Core net income attributable to Roche shareholders	10,470	10,955
Increase in non-controlling interests' share of core net income, assuming all outstanding Chugai stock options exercised	(1)	(1)
Net income used to calculate diluted earnings per share	**10,469**	**10,954**
Per share information (millions of shares and non-voting equity securities)		
Weighted average number of shares and non-voting equity securities in issue	849	855
Adjustment for assumed exercise of equity compensation plans, where dilutive	2	2
Weighted average number of shares and non-voting equity securities in issue used to calculate diluted earnings per share	**851**	**857**
Core earnings per share (diluted) (CHF)	**12.30**	**12.78**

Supplementary Operating Free Cash Flow Information

Divisional operating free cash flow information in millions of CHF

	Pharmaceuticals 2011	2010	Diagnostics 2011	2010	Corporate 2011	2010	Group 2011	2010
Depreciation, amortisation and impairment								
Depreciation of property, plant and equipment	1,079	1,151	763	775	6	7	1,848	1,933
Amortisation of intangible assets	152	175	368	444	–	–	520	619
Impairment of property, plant and equipment	93	109	3	29	–	–	96	138
Impairment of intangible assets	79	634	59	33	–	–	138	667
Impairment of net assets-held-for-sale	117	–	–	–	–	–	117	–
Total	**1,520**	**2,069**	**1,193**	**1,281**	**6**	**7**	**2,719**	**3,357**
Other adjustments								
Add back								
– Expenses for equity-settled equity compensation plans	316	248	36	41	18	13	370	302
– Net (income) expense for provisions	525	1,307	10	311	1	7	536	1,625
– Net gain (loss) from disposals	34	(51)	6	7	(4)	–	36	(44)
– Non-cash working capital and other items	452	323	139	48	–	(9)	591	362
Deduct								
– Net cash flow from equity-settled equity compensation plans	(36)	(56)	(11)	(13)	(6)	(7)	(53)	(76)
– Utilisation of provisions	(877)	(579)	(65)	(144)	(6)	(6)	(948)	(729)
– Proceeds from disposals	352	35	47	98	–	9	399	142
Total	**766**	**1,227**	**162**	**348**	**3**	**7**	**931**	**1,582**
Operating profit cash adjustments	**2,286**	**3,296**	**1,355**	**1,629**	**9**	**14**	**3,650**	**4,939**
EBITDA								
Core operating profit	13,406	14,776	2,178	2,202	(435)	(387)	15,149	16,591
Depreciation and impairment of property, plant and equipment – Core basis	1,016	1,142	762	777	6	7	1,784	1,926
EBITDA	**14,422**	**15,918**	**2,940**	**2,979**	**(429)**	**(380)**	**16,933**	**18,517**
– margin, % of sales	44.0	43.0	30.2	28.6	–	–	39.8	39.0

Supplementary Balance Sheet Information

Net operating assets to balance sheet reconciliation 2011 in millions of CHF

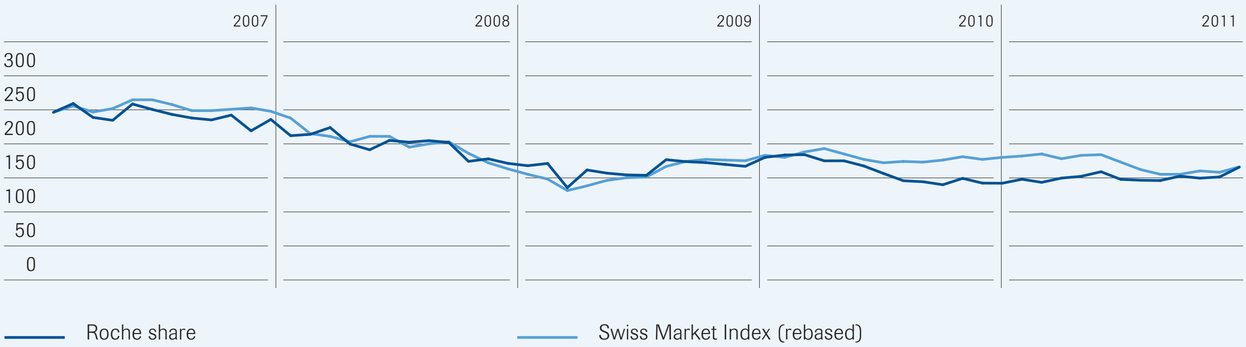
	Pharmaceuticals	Diagnostics	Corporate	Taxation and Treasury	Roche Group
Property, plant and equipment	11,586	4,484	131	–	16,201
Goodwill	2,233	5,610	–	–	7,843
Intangible assets	2,618	2,508	–	–	5,126
Inventories	3,177	1,883	–	–	5,060
Provisions	(2,124)	(481)	(128)	–	(2,733)
Associates	–	–	–	24	24
Current income tax net assets	–	–	–	(1,984)	(1,984)
Deferred income tax net assets	–	–	–	2,158	2,158
Post-employment benefit net assets	–	–	–	(4,952)	(4,952)
Marketable securities	–	–	–	7,433	7,433
Cash and cash equivalents	–	–	–	3,854	3,854
Debt	–	–	–	(26,853)	(26,853)
Other net assets					
– Net working capital	2,268	1,618	(42)	–	3,844
– Long-term net operating assets	250	(99)	(1)	–	150
– Other	–	–	–	(689)	(689)
Total net assets	**20,008**	**15,523**	**(40)**	**(21,009)**	**14,482**

Net operating assets to balance sheet reconciliation 2010 in millions of CHF

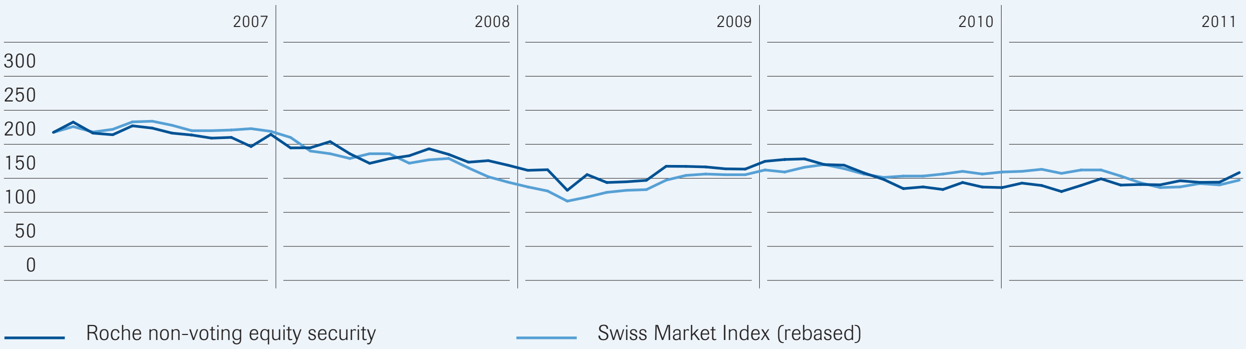
	Pharmaceuticals	Diagnostics	Corporate	Taxation and Treasury	Roche Group
Property, plant and equipment	12,224	4,368	137	–	16,729
Goodwill	2,205	5,517	–	–	7,722
Intangible assets	2,430	2,703	–	–	5,133
Inventories	3,322	1,650	–	–	4,972
Provisions	(2,489)	(459)	(132)	–	(3,080)
Associates	–	–	–	13	13
Current income tax net assets	–	–	–	(1,869)	(1,869)
Deferred income tax net assets	–	–	–	1,483	1,483
Post-employment benefit net assets	–	–	–	(3,808)	(3,808)
Marketable securities	–	–	–	9,060	9,060
Cash and cash equivalents	–	–	–	1,841	1,841
Debt	–	–	–	(30,058)	(30,058)
Other net assets					
– Net working capital	2,444	1,375	(45)	–	3,774
– Long-term net operating assets	225	(104)	(2)	–	119
– Other	–	–	–	(369)	(369)
Total net assets	**20,361**	**15,050**	**(42)**	**(23,707)**	**11,662**

Roche Securities

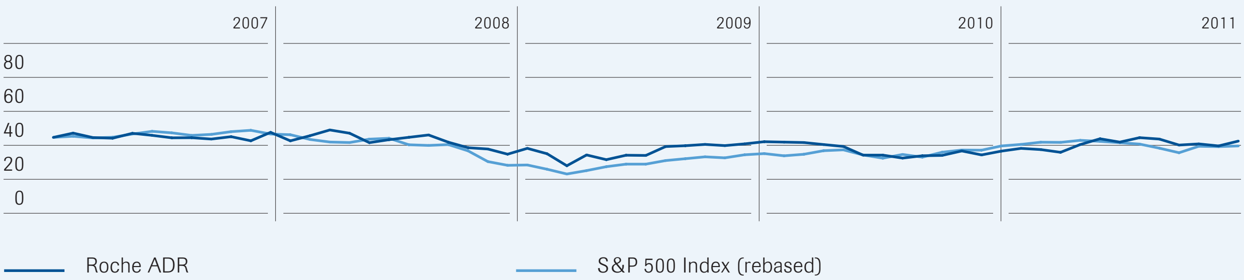
Price development of share in CHF



Price development of non-voting equity security *(Genussschein)* in CHF



Price development of American Depositary Receipt (ADR) in USD



Four Roche American Depositary Receipts (ADRs) are equivalent to one non-voting equity security *(Genussschein)*. ADRs have been traded in the United States over-the-counter market since July 1992.
Information in these tables is restated for the change in the ratio for the ADRs from 1:1 to 2:1 effective 24 January 2005 and the change in the ratio for the ADRs from 2:1 to 4:1 effective 9 January 2009.

Number of shares and non-voting equity securities [a]

	2007	2008	2009	2010	2011
Number of shares (nominal value: CHF 1.00)	160,000,000	160,000,000	160,000,000	160,000,000	160,000,000
Number of non-voting equity securities *(Genussscheine)* (no nominal value)	702,562,700	702,562,700	702,562,700	702,562,700	702,562,700
Total	**862,562,700**	**862,562,700**	**862,562,700**	**862,562,700**	**862,562,700**
Number of own non-voting equity securities *(Genussscheine)* held (year-end)	(2,255,365)	(2,958,402)	(6,682,120)	(11,214,765)	(15,084,967)
Total in issue	**860,307,335**	**859,604,298**	**855,880,580**	**851,347,935**	**847,477,733**

Data per share and non-voting equity security in CHF

		2007	2008	2009	2010	2011
Earnings (diluted)		11.16	10.23	9.02	10.11	10.98
Equity attributable to Roche shareholders		52.87	51.74	8.61	11.12	14.27
Dividend		4.60	5.00	6.00	6.60	6.80 [c]
Stock price of share [b]	Opening	247.50	213.00	168.70	181.00	142.80
	High	266.25	229.50	182.10	191.70	167.00
	Low	209.70	155.20	130.30	134.30	123.80
	Year-end	213.00	168.70	181.00	142.80	166.60
Stock price of non-voting equity security *(Genussschein)* [b]	Opening	218.50	195.60	162.50	175.80	137.00
	High	240.10	208.60	179.00	186.00	159.70
	Low	190.30	148.20	124.10	130.20	117.00
	Year-end	195.60	162.50	175.80	137.00	159.20

Market capitalisation in millions of CHF

	2007	2008	2009	2010	2011
Year-end	171,060	140,678	151,296	117,563	136,102

Key ratios (year-end)

	2007	2008	2009	2010	2011
Dividend yield of shares in %	2.2	3.0	3.3	4.6	4.0
Dividend yield of non-voting equity securities *(Genussscheine)* in %	2.4	3.1	3.4	4.8	4.1
Price/earnings of shares	19	16	20	14	15
Price/earnings of non-voting equity securities *(Genussscheine)*	18	16	19	14	15

a) Each non-voting equity security *(Genussschein)* confers the same rights as any of the shares to participate in the available earnings and any remaining proceeds from liquidation following repayment of the nominal value of the shares and the participation certificate capital (if any). Shares and non-voting equity securities are listed on the SIX Swiss Exchange. Roche Holding Ltd has no restrictions as to ownership of its shares or non-voting equity securities.
b) All stock price data reflect daily closing prices.
c) Dividend 2011 as proposed by the Board of Directors.

Ticker symbols

	Share	Non-voting equity security	American Depositary Receipt (ADR)
SIX Swiss Exchange	RO	ROG	–
Bloomberg	RO SW	ROG VX	RHHBY US
Reuters	RO.S	ROG.VX	RHHBY.PK

ROCHE HOLDING LTD, BASEL

Financial Statements

Income statement in millions of CHF

	Year ended 31 December 2011	2010
Income		
Income from participations	8,450	5,733
Interest income from loans to Group companies	51	71
Interest and investment income	7	5
Guarantee fee income from Group companies	203	268
Other income	26	27
Total income	**8,737**	**6,104**
Expenses		
Financial expenses	(2)	(94)
Administration expenses	(29)	(37)
Other expenses	(32)	(33)
Total expenses	**(63)**	**(164)**
Profit for the year before taxes	**8,674**	**5,940**
Taxes	(26)	(21)
Net profit for the year	**8,648**	**5,919**

Balance sheet in millions of CHF

	31 December 2011	31 December 2010
Non-current assets		
Participations	10,266	7,470
Long-term loans	–	2
Long-term loans to Group companies	578	574
Total non-current assets	**10,844**	**8,046**
Current assets		
Short-term loans to Group companies	–	1,000
Accounts receivable from Group companies	813	668
Other accounts receivable	1	1
Marketable securities	3,746	3,794
Liquid funds	1,070	–
Total current assets	**5,630**	**5,463**
Total assets	**16,474**	**13,509**
Equity		
Share capital	160	160
Non-voting equity securities *(Genussscheine)*	p.m.	p.m.
General legal reserve	300	300
Free reserve	4,706	4,706
Special reserve	2,152	2,152
Available earnings:		
– Balance brought forward from previous year	437	211
– Net profit for the year	8,648	5,919
Total equity	**16,403**	**13,448**
Non-current liabilities		
Provisions	35	35
Total non-current liabilities	**35**	**35**
Current liabilities		
Accounts payable to Group companies	4	–
Unrealised foreign currency gains	4	–
Other liabilities	28	26
Total current liabilities	**36**	**26**
Total liabilities	**71**	**61**
Total equity and liabilities	**16,474**	**13,509**

p.m. = pro memoria. Non-voting equity securities have no nominal value.

Notes to the Financial Statements

1. Summary of significant accounting policies

Basis of preparation of the financial statements

The financial statements of Roche Holding Ltd, Basel, are prepared in accordance with the provisions of Swiss law.

Participations

The major participations of the company are listed in Note 33 to the Roche Group Consolidated Financial Statements.

Valuation methods and translation of foreign currencies

Marketable securities are reported at the lower of cost or market value. All other assets, including participations, are reported at cost less appropriate write-downs. Assets and liabilities denominated in foreign currencies are translated into Swiss francs using year-end rates of exchange, except participations which are translated at historical rates. Transactions during the year which are denominated in foreign currencies are translated at the exchange rates effective at the relevant transaction dates. Resulting exchange gains and losses are recognised in the income statement with the exception of unrealised gains which are deferred.

Taxes

The tax charge includes corporate income and capital taxes.

2. Equity

Share capital

As in the previous year, share capital amounts to 160 million Swiss francs. The share capital consists of 160,000,000 bearer shares with a nominal value of 1 Swiss franc each. Included in equity are 702,562,700 non-voting equity securities *(Genussscheine)*. They are not part of the share capital and confer no voting rights. However each non-voting equity security *(Genussschein)* confers the same rights as any of the shares to participate in the available earnings and in any remaining proceeds from liquidation following repayment of the nominal value of the share capital and, if any, participation certificates.

Movement in recognised amounts in millions of CHF

	Share capital	General legal reserve	Free reserve	Special reserve	Available earnings	Total equity
As at 1 January 2009	160	300	5,519	2,152	3,501	11,632
– Net income	–	–	–	–	5,385	5,385
– Dividends	–	–	–	–	(4,313)	(4,313)
– Transfer to free reserve	–	–	(813)	–	813	–
As at 31 December 2009	**160**	**300**	**4,706**	**2,152**	**5,386**	**12,704**
– Net income	–	–	–	–	5,919	5,919
– Dividends	–	–	–	–	(5,175)	(5,175)
As at 31 December 2010	**160**	**300**	**4,706**	**2,152**	**6,130**	**13,448**
– Net income	–	–	–	–	8,648	8,648
– Dividends	–	–	–	–	(5,693)	(5,693)
As at 31 December 2011	**160**	**300**	**4,706**	**2,152**	**9,085**	**16,403**

3. Contingent liabilities

Guarantees
The company has issued guarantees for certain bonds and notes, commercial paper and credit facilities of Group companies. The nominal amount outstanding at 31 December 2011 was 25.2 billion Swiss francs (2010: 28.5 billion Swiss francs). These primarily relate to the additional bonds and notes issued in 2009 by Group companies to finance the Genentech transaction, which are guaranteed by the Company. These are described in Note 26 to the Roche Group Consolidated Financial Statements on pages 110 to 114.

4. Significant shareholders

All shares in the Company are bearer shares, and for this reason the Company does not keep a register of shareholders. The following figures are based on information from shareholders, the shareholder validation check at the Annual General Meeting of 1 March 2011 and on other information available to the Company.

Controlling shareholders
As of 31 December 2010, based on information supplied to the Group, a shareholder group with pooled voting rights owned 80,020,000 shares, which represented 50.0125% of the issued shares. [a] This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Ms Maja Oeri, Mr Jörg Duschmalé and Mr Lukas Duschmalé.

On 24 March 2011 the shareholder group announced that it would continue the shareholder pooling agreement existing since 1948 with a modified shareholder composition. A charitable foundation established by pool members has been admitted to the pool. The pool now consists of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Mr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder group with pooled voting rights now holds 72,018,000 shares, corresponding to 45.01% of the shares issued. [b] Ms Maja Oeri, formerly a member of the pool, holds now 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

As of 31 December 2011, 53,332,863 (2010: 53,332,863) shares (participation below 33⅓%) are owned by Novartis Ltd, Basel, including affiliates thereof. [c]

a) Information supplied by the shareholders. This figure of 80,020,000 shares does not include shares without pooled voting rights held outside this group by individual members of the group.
b) Information supplied by the shareholders. This figure of 72,018,000 shares does not include shares without pooled voting rights held outside this group by individual members of the group.
c) Figures as of 31 December 2011 supplied by Novartis Ltd, Basel.

5. Risk management

The detailed disclosures regarding risk management that are required by Swiss law are included in the Roche Group Consolidated Financial Statements on pages 121 to 129.

6. Board and Executive remuneration

Board of Directors

Members of the Board of Directors of Roche Holding Ltd receive an annual remuneration and payment for their time and expenses related to their membership of Board committees.

Remuneration of members of the Board of Directors in thousands of CHF

	2011	2010
B. Gehrig	400	400
A. Hoffmann	400	400
P. Baschera	330	330
J.I. Bell	390	330
P. Brabeck-Letmathe [a]	–	50
P. Bulcke [b]	280	–
W.M. Burns	352	306
L.J.R. de Vink	330	330
C. Franz [b]	280	–
W. Frey [a]	50	360
D.A. Julius	360	360
A.R. Levinson	683	636
A. Oeri	360	360
W. Ruttenstorfer [a]	50	330
H. Teltschik [a]	–	77
P.R. Voser [b]	280	–
B. Weder di Mauro	330	360
Total remuneration of Board of Directors	**4,875**	**4,629**

a) At the Annual General Meeting on 1 March 2011, W. Frey and W. Ruttenstorfer did not stand for re-election. At the Annual General Meeting on 2 March 2010, P. Brabeck-Letmathe and H. Teltschik did not stand for re-election.
b) At the Annual General Meeting on 1 March 2011, P. Bulcke, C. Franz and P.R. Voser were elected as new members of the Board of Directors.

The remuneration for Dr Levinson includes payments for his consulting work and for his Board membership of Genentech totalling 353 thousand Swiss francs (2010: 356 thousand Swiss francs). The Chairman of the Board of Directors, Dr Franz B. Humer, received remuneration as shown in the table below.

Remuneration of the Chairman of the Board of Directors in thousands of CHF

	2011	2010	2009
Annual salary, including bonuses and expenses	5,600	6,707	8,230
Bonus/Special Stock Awards	–	–	2,792
Pensions and other post-employment benefits	2,984	2,996	2,995
Equity compensation plans	75	75	75
Other employee benefits	226	255	262
Total remuneration received	**8,885**	**10,033**	**14,354**
Social security costs	370	566	763
Total	**9,255**	**10,599**	**15,117**

Corporate Executive Committee

Members of the Corporate Executive Committee ('CEC') of Roche Holding Ltd receive remuneration, indirect benefits and participate in certain equity compensation plans as shown in the table below. The Group's CEO, Dr Severin Schwan, was the member of the Corporate Executive Committee with the highest total remuneration and his remuneration is also disclosed. New members of the Corporate Executive Committee (Dr Hippe in 2011, Mr O'Day in 2010 and Dr Soriot in 2009) are included for the full calendar year in which they joined the CEC. Similarly, members of the Corporate Executive Committee retiring part way through the year (Dr Hunziker in 2011) are included for the full calendar year in which they left the CEC.

Remuneration of the members of the Corporate Executive Committee in thousands of CHF

	2011 Total CEC	2011 – of which S. Schwan	2010 Total CEC	2010 – of which S. Schwan	2009 Total CEC	2009 – of which S. Schwan
Annual salary, including bonuses and expenses	18,698	5,530	23,142	6,780	29,742	5,905
Bonus/Special Stock Awards	3,610	929	–	–	6,543	1,675
Pensions and other post-employment benefits	4,318	459	3,210	456	2,495	457
Equity compensation plans	11,285	4,480	12,272	4,152	16,033	4,039
Retirement awards	4,000	–	–	–	–	–
Other employee benefits	622	5	135	9	248	25
Total remuneration received	**42,533**	**11,403**	**38,759**	**11,397**	**55,061**	**12,101**
Social security costs	1,392	371	1,200	351	1,909	386
Total	**43,925**	**11,774**	**39,959**	**11,748**	**56,970**	**12,487**

Bonus/Special Stock Awards. During 2009 the Chairman of the Board of Directors and members of the Corporate Executive Committee were granted a total of 96,750 Special Stock Awards. The Chairman of the Board of Directors received 34,084 awards and members of the CEC received a total of 62,666 awards, of which 20,450 awards were granted to Dr Schwan. The fair value of these awards for the employee is calculated based on the fair value of non-voting equity securities *(Genussscheine)* at the grant date (CHF 146.70 or CHF 169.40) discounted to take into account the period in which they are blocked (3 years: 83.962%, 10 years: 55.839%). There were no such awards in 2010. In 2011 50% of the bonus for members of the Corporate Executive Committee was awarded in the form Bonus Stock Awards. The members of the CEC received a total of 32,342 awards, of which 10,214 awards were granted to Dr Schwan. The fair value of these awards for the employee is calculated based on the fair value of non-voting equity securities *(Genussscheine)* at the grant date discounted to take into account the period in which they are blocked (3 years: 83.962%, 10 years: 55.839%).

Employer contribution to social security schemes and pension plans. The Group pays social insurance contributions in respect of the above remuneration and pays contributions to pension and other post-employment benefit plans for the Chairman of the Board of Directors and members of the Corporate Executive Committee.

Equity Compensation Plans. The Chairman of the Board of Directors and members of the Corporate Executive Committee also participate in certain equity compensation plans as described below. The terms and vesting conditions of these awards are disclosed in Note 10 to the Consolidated Financial Statements. The fair values used in the Consolidated Financial Statements represent the cost to the company at grant date and reflect amongst other matters the observed exercise behaviour and exit rate for the whole population that receive the awards and initial simulations of any performance conditions. For the purposes of these remuneration disclosures the values are calculated based on the fair value that the employee receives taking into account the preliminary assessment of any completed performance conditions.

The Chairman of the Board of Directors and members of the Corporate Executive Committee are eligible to participate in Roche Connect, a programme that enables employees to make regular deductions from their salaries to purchase non-voting equity securities. The Group contributes to the programme, which allows the employees to purchase non-voting equity securities at a discount (usually 20%).

During 2011 members of the Corporate Executive Committee were granted 572,121 Stock-settled Stock Appreciation Rights (S-SARs). The individual awards relating to 2011 are shown in the table below. The fair value of these awards for the employee is 8,811,711 Swiss francs, which is calculated using the Black-Scholes formula, assuming holding until maturity, and deducting 11% for the average two-year vesting period.

Members of the Corporate Executive Committee and other members of senior management participate in the Roche Performance Share Plan (PSP). The Group has three overlapping three-year PSPs. The target awards for the three-year cycle are defined at the beginning of the cycle and the awards are considered to form part of the employee's remuneration in three equal annual amounts over the three-year cycle. Each award will result in between zero and two non-voting equity securities *(Genussscheine)*, depending upon the achievement of the performance targets, and the discretion of the Board of Directors. The individual awards relating to 2011 are shown in the table below. The number of the awards is calculated as follows:

- PSP 2009–2011: At the end of the cycle the performance targets were not achieved and accordingly the participants received none of the originally targeted non-voting equity securities *(Genussscheine)*.
- PSP 2010–2012: One non-voting equity security *(Genussschein)* per award.
- PSP 2011–2013: One non-voting equity security *(Genussschein)* per award.
- The resulting allocations are multiplied by the non-voting equity security *(Genussschein)* price at 31 December 2011 of 159.20 Swiss francs to give the fair value for the remuneration received by the employee.

Remuneration from equity compensation plans in 2011 in thousands of CHF

	Roche Connect Employer contributions	S-SAR '11 (number)	S-SAR awards S-SAR '11 fair value	PSP '09–'11 (number)	PSP '10–'12 (number)	PSP '11–'13 (number)	PSP awards PSP fair value	Total fair value
Total CEC	226	572,121	8,812	–	16,574	25,778	2,247	11,285
– of which								
S. Schwan	100	231,483	3,560	–	5,991	9,460	820	4,480

Other employee benefits. These include tax advisory costs and other incidental benefits.

Transactions with former members of the Corporate Executive Committee. Pensions and tax consulting services totalling 2 million Swiss francs were paid by the Group in 2011 to two former Corporate Executive Committee members (2010 and 2009: 2 million Swiss francs to four former members).

7. Board and Executive shareholdings

Board of Directors

Directors Mr André Hoffmann and Dr Andreas Oeri and other members of the founder's families who are closely associated with them belong to a shareholder group with pooled voting rights. At the end of 2011 this group held 72,018,000 shares (45.01% of issued shares) (2010: 80,020,000 shares/50.01% of issued shares). Detailed information about this group is given in Note 4. In addition at the end of the year the members of the Board of Directors and persons closely associated with them held shares and non-voting equity securities *(Genussscheine)* as shown in the table below.

Shareholdings of members of the Board of Directors

	Shares		Non-voting equity securities *(Genussscheine)*		
	2011	2010	2011	2010	Other
F.B. Humer	7,492	3	192,680	197,215	b), f)
B. Gehrig	50	50	300	150	
A. Hoffmann	– a)	– a)	200	200	c)
P. Baschera	1	1	–	–	
J.I. Bell	300	300	1,647	1,647	
P. Bulcke	–	n/a	850	n/a	
W.M. Burns	3	3	83,784	79,254	b)
L.J.R. de Vink	–	–	–	–	d)
C. Franz	–	n/a	350	n/a	
W. Frey	n/a	72,500	n/a	–	
D.A. Julius	350	350	–	–	e)
A.R. Levinson	–	–	–	–	
A. Oeri	– a)	– a)	307,793	307,793	c)
W. Ruttenstorfer	n/a	1,000	n/a	–	
P.R. Voser	–	n/a	3,600	n/a	
B. Weder di Mauro	200	200	800	–	
Total	**8,396**	**74,407**	**592,004**	**586,259**	

a) Does not include shares held in the shareholder group with pooled voting rights.
b) Equity compensation awards: Roche Option Plan, S-SARs and Roche Performance Share Plan. See below.
c) Mr Hoffmann and Dr Oeri each held 250,000 UBS Long/Short Certificates on Roche bearer shares (RO) versus Roche non-voting equity securities (ROG).
d) Mr de Vink held 31,600 Roche American Depositary Receipts (ADRs) (2010: 31,600).
e) Close relatives of Dr Julius held 1,550 Roche non-voting equity securities *(Genussscheine)* (2010: 1,550).
f) Dr Humer held 2,500 ROGTPK Tracker-plus certificates from Zürcher Kantonalbank on underlying Roche non-voting equity securities (ROG) (2010: 2,500).

Corporate Executive Committee

Members of the Corporate Executive Committee and persons closely associated with them held shares and non-voting equity securities *(Genussscheine)* as shown in the table below.

Shareholdings of members of the Corporate Executive Committee

	Shares 2011	Shares 2010	Non-voting equity securities *(Genussscheine)* 2011	Non-voting equity securities *(Genussscheine)* 2010	Other
S. Schwan	3	3	39,867	35,978	a), b)
S. Ayyoubi	3	3	12,329	12,213	a)
A. Hippe	–	n/a	2,708	n/a	a), d)
E. Hunziker	n/a	3	n/a	62,458	a), e)
G. A. Keller	2,153	1,253	28,168	31,278	a), c)
D. O'Day	3	3	674	220	a)
P. Soriot	2	2	6,373	6,314	a)
Total	**2,164**	**1,267**	**90,119**	**148,461**	

a) Equity compensation awards: Roche Option Plan, S-SARs and Roche Performance Share Plan. See below.
b) Close relatives of Dr Schwan held 570 Roche non-voting equity securities *(Genussscheine)* (2010: 570).
c) Close relatives of Dr Keller held 1,100 Roche shares (2010: 70 Roche non-voting equity securities *(Genussscheine)*).
d) Dr Hippe was appointed to the Corporate Executive Committee effective 1 April 2011.
e) Dr Hunziker resigned from the Corporate Executive Committee effective 31 March 2011.

At 31 December 2011 the Chairman of the Board of Directors, Mr Burns and members of the Corporate Executive Committee held Stock-settled Stock Appreciation Rights (S-SARs) as shown in the table below. The awards held by Dr Humer, the current Chairman of the Board of Directors, and Mr Burns, a current member of the Board of Directors, were issued to them in their previous capacities as members of the Corporate Executive Committee. Each option entitles the holder to purchase one Roche non-voting equity security *(Genussschein)* at a specified strike price. The terms and vesting conditions of these awards are disclosed in Note 10 to the Consolidated Financial Statements and additional supplementary information is in the Remuneration Report, which is included in the Business Report (Part 1 of this Annual Report) on pages 126 to 136.

S-SARs awards held at 31 December 2011

Year of issue	2011	2010	2009	2008	2007	2006	Total
S. Schwan	231,483	154,443	175,362	105,576	29,190	15,696	711,750
S. Ayyoubi	69,447	46,335	43,842	21,117	3,243	2,517	186,501
A. Hippe	10,767	–	–	–	–	–	10,767
G. A. Keller	86,808	57,918	43,842	63,345	24,327	15,696	291,936
D. O'Day	57,873	38,613	21,762	20,133	10,269	5,856	154,506
P. Soriot	115,743	77,223	69,051	63,345	29,190	45,180	399,732
Total CEC	**572,121**	**374,532**	**353,859**	**273,516**	**96,219**	**84,945**	**1,755,192**
F. B. Humer	–	–	–	–	48,651	52,317	100,968
W. M. Burns	–	–	109,602	105,576	48,651	26,160	289,989
Total	**572,121**	**374,532**	**463,461**	**379,092**	**193,521**	**163,422**	**2,146,149**
Strike price (CHF)	140.10[b)]	175.50	145.40	195.80	229.60	195.00[a)]	–
Expiry date	Feb. 2018[b)]	Feb. 2017	Feb. 2016	Jan. 2015	Feb. 2014	Feb. 2013[a)]	–

a) Dr Soriot's 2006 awards included 21,636 awards that have a strike price of CHF 196.50 and expire in January 2013.
b) Dr Hippe's 2011 awards have a strike price of CHF 140.30 and expire in April 2018.

At 31 December 2011 members of the Corporate Executive Committee as shown in the table below held PSP awards from the PSP performance cycles 2010–2012 and 2011–2013. The terms and vesting conditions of these awards are disclosed in Note 10 to the Consolidated Financial Statements and additional supplementary information is in the Remuneration Report on pages 126 to 136 of the Business Report (Part 1 of this Annual Report). Each award will result in between zero and two non-voting equity securities *(Genussscheine),* depending upon the achievement of the performance targets and the discretion of the Board of Directors. At the end of the 2009–2011 cycle the performance targets were not achieved and accordingly the participants received none of the originally targeted non-voting equity securities *(Genussscheine).* The total target number of awards for the other outstanding cycles as at 31 December 2011 are shown in the table below.

Roche Performance Share Plan awards held at 31 December 2011

	PSP 2010–2012	PSP 2011–2013
S. Schwan	5,991	9,460
S. Ayyoubi	1,597	2,838
A. Hippe	–	2,838
G. A. Keller	2,995	3,547
D. O'Day	1,997	2,365
P. Soriot	3,994	4,730
Total CEC	**16,574**	**25,778**
Allocation date	Feb. 2013	Feb. 2014

At 31 December 2010 the Chairman of the Board of Directors, Mr Burns and members of the Corporate Executive Committee at that time held a total of 2,060,235 Stock-settled Stock Appreciation Rights and Roche Option Plan awards, and had outstanding a total of 37,940 awards granted under the Roche Performance Share Plan.

Appropriation of Available Earnings

Proposals to the Annual General Meeting in CHF

	2011	2010
Available earnings		
Balance brought forward from previous year	436,741,030	210,556,466
Net profit for the year	8,647,901,921	5,919,098,384
Total available earnings	**9,084,642,951**	**6,129,654,850**
Appropriation of available earnings		
Distribution of an ordinary dividend of CHF 6.80 gross per share and non-voting equity security *(Genussschein)* as against CHF 6.60 last year	(5,865,426,360)	(5,692,913,820)
Transfer to free reserve	(1,293,450,000)	–
Total appropriation of available earnings	**(7,158,876,360)**	**(5,692,913,820)**
To be carried forward on this account	**1,925,766,591**	**436,741,030**

Report of the Statutory Auditor on the Financial Statements

Report of the Statutory Auditor on the Financial Statements to the Annual General Meeting of Roche Holding Ltd, Basel

As statutory auditor, we have audited the accompanying financial statements of Roche Holding Ltd, which comprise the income statement, balance sheet and notes on pages 155 to 165 for the year ended 31 December 2011.

Board of Directors' Responsibility. The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion. In our opinion, the financial statements for the year ended 31 December 2011 comply with Swiss law and the company's articles of incorporation.

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG

KPMG AG

Ian Starkey	François Rouiller
Licensed Audit Expert	Licensed Audit Expert
Auditor in Charge	

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Next Annual General Meeting:
6 March 2012

Cautionary statement regarding forward-looking statements

This Annual Report contains certain forward-looking statements. These forward-looking statements may be identified by words such as 'believes', 'expects', 'anticipates', 'projects', 'intends', 'should', 'seeks', 'estimates', 'future' or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. Various factors may cause actual results to differ materially in the future from those reflected in forward-looking statements contained in this Annual Report, among others: (1) pricing and product initiatives of competitors; (2) legislative and regulatory developments and economic conditions; (3) delay or inability in obtaining regulatory approvals or bringing products to market; (4) fluctuations in currency exchange rates and general financial market conditions; (5) uncertainties in the discovery, development or marketing of new products or new uses of existing products, including without limitation negative results of clinical trials or research projects, unexpected side effects of pipeline or marketed products; (6) increased government pricing pressures; (7) interruptions in production; (8) loss of or inability to obtain adequate protection for intellectual property rights; (9) litigation; (10) loss of key executives or other employees; and (11) adverse publicity and news coverage.

The statement regarding earnings per share growth is not a profit forecast and should not be interpreted to mean that Roche's earnings or earnings per share for 2011 or any subsequent period will necessarily match or exceed the historical published earnings or earnings per share of Roche.

The Roche Finance Report is published in German and English. In case of doubt or differences of interpretation, the English version shall prevail over the German text.

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