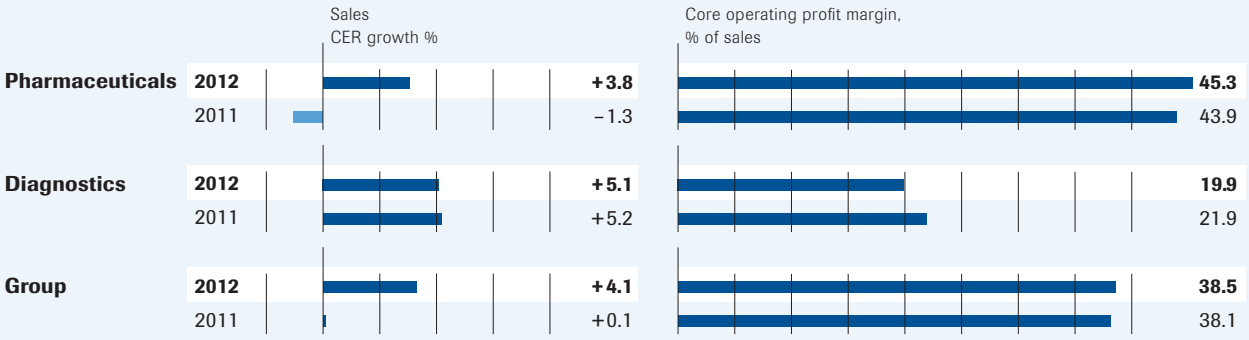
Roche

Half-Year Report

2012

Finance in brief

Key interim results



	Six months ended 30 June 2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)	% of sales 2012	% of sales 2011
IFRS results						
Sales	22,423	21,671	+3	+4		
Operating profit	6,332	7,460	–15	–13	28.2	34.4
Net income	4,368	5,259	–17	–14	19.5	24.3
Net income attributable to Roche shareholders	4,255	5,151	–17	–14		
Diluted EPS (CHF)	4.99	6.04	–17	–13		
Core results						
Research and development	4,043	3,873	+4	+3	18.0	17.9
Core operating profit	8,641	8,251	+5	+7	38.5	38.1
Core EPS (CHF)	6.94	6.68	+4	+8		
Free cash flow						
Operating free cash flow	7,170	6,856	+5	+7	32.0	31.6
Free cash flow	(1,309)	(967)	+35	+14		

	30 June 2012 (mCHF)	31 December 2011 (mCHF)	% change (CHF)
Net debt	(17,333)	(15,566)	+11
Capitalisation	38,629	41,335	–7
– Debt	26,553	26,853	–1
– Equity	12,076	14,482	–17

CER (Constant Exchange Rates): The percentage changes at Constant Exchange Rates are calculated using simulations by reconsolidating both the 2012 and 2011 results at constant exchange rates (the average rates for the year ended 31 December 2011). 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 plans and amortisation and impairment of goodwill and intangible assets. This allows a transparent assessment of both the actual results and the underlying performance of the business. A full income statement for the Group and the operating results of the divisions are shown on both an IFRS and core basis. The core concept is fully described on pages 72–75 and reconciliations between the IFRS and Core results are given there.

2012

HIGHLIGHTS FIRST HALF

Group sales 22.4 billion Swiss francs: +4% at constant exchange rates (+3% in Swiss francs).

Core operating profit up 7% at 8.6 billion Swiss francs. Core operating profit margin rises 1.0 percentage point (+0.4 percentage points in Swiss francs) to 38.5% due to underlying business performance and productivity measures.

Core Earnings per Share up 8% at 6.94 Swiss francs.

Net income down 14% mainly due to one-off costs related to closure of Nutley and productivity measures in Applied Science and Diabetes Care.

Successfully launched breast cancer medicine Perjeta as well as skin cancer drugs Zelboraf and Erivedge; full product pipeline with 72 new molecular entities in clinical development.

On track to file for EU, US approval of T–DM1 (trastuzumab emtansine) in aggressive form of breast cancer during the second half of this year.

Nutley site closure and streamlining of related R&D activities to result in annual savings of 370 million Swiss francs to be largely allocated for the development of Roche's growing late-stage pipeline; related one-off closure costs 858 million Swiss francs of which 446 million are cash relevant.

Roche confirms full-year outlook. Group and Pharmaceuticals sales expected to grow at low to mid-single-digit rates; Diagnostics to grow above the market; target of high single-digit Core Earnings per Share growth.

Contents

BUSINESS REVIEW

Business Review

Sales

In the first half of 2012 Group sales rose 4%[1] to 22.4 billion Swiss francs despite continued pricing pressures, in particular in Europe. The main growth drivers were Roche's cancer medicines, hepatitis drug Pegasys, rheumatoid arthritis treatment Actemra/RoActemra and the clinical laboratory business.

Pharmaceuticals – strong growth in US and emerging markets

Pharmaceuticals sales rose 4% in the first half, mainly due to Roche's oncology portfolio, which grew 8%. Pegasys and Actemra/RoActemra also lifted the division's performance.

Sales in the US, the division's largest market, grew 6% on the back of demand for oncology treatments MabThera/Rituxan, Herceptin and Xeloda as well as Pegasys. Sales in Roche's key seven emerging markets[2] grew 13%, due to increased spending on healthcare and higher use of Roche's cancer therapies. In Brazil and China, two of Roche's fastest-growing markets, Pharmaceuticals sales rose 22% and 24% respectively.

Sales in Japan remained stable in the first six months as a 12% rise in Avastin sales and the Mircera launch offset a 53% drop in Epogin sales.

Sales in Western Europe fell 3%, negatively impacted by generics and government austerity measures. In the first six months of 2012 price pressure had a negative sales growth impact of about 2 percentage points on Pharmaceuticals sales in Western Europe and about 1 percentage point on a global level. See *Sales by product* and *by region* on pages 21–24 for more details.

Diagnostics – Roche expands market leadership

First-half sales at the Diagnostics Division rose 5% to 5.0 billion Swiss francs, outpacing the global *in vitro* diagnostics market. This increase was driven by Professional Diagnostics (+9%), Tissue Diagnostics (+17%) and Molecular Diagnostics (+6%), and highlights the demand from clinical laboratories for Roche's broad product offering. A key growth contributor was the immunoassay business, which helps diagnose diseases ranging from viral infections to cancers through highly automated immunochemical blood testing. The immunoassay business is on track to deliver its 15th consecutive year of double-digit sales growth and now accounts for 22% of divisional sales.

Sales at Diabetes Care fell 2% due to reimbursement changes in major European markets. Applied Science sales were 3% lower, largely due to competition in gene sequencing and a slowdown in public research funding. The unit is now consolidating business segments whilst continuing to invest in new technologies, particularly sequencing.

Divisional sales grew in all regions. The main growth driver was Asia–Pacific (+17%) as increasing demand for Roche's lab solutions boosted sales in China (+32%) and other countries. Roche Diagnostics plans to invest over 300 million US dollars over the next five years in China to make lab automation and diagnostic testing possible in additional cities and hospitals. See *Sales by business area* and *by region* on pages 30–31 for more details.

Good progress with trade receivables

The Group made very good progress collecting the money it is owed in Southern Europe. Trade receivables with public customers fell to 1.5 billion Swiss francs at the end of June 2012 from 2.1 billion at the end of 2011. The new Spanish Government established a plan, known as the 'Montoro' plan, in March 2012 to settle debts from municipalities and regional institutions with suppliers. Roche collected the full amount for which it applied by the end of June.

1 Unless otherwise stated all growth rates are calculated using constant exchange rates.
2 Roche's key emerging markets, also referred to as the E7 key emerging markets, are Brazil, China, India, Mexico, Russia, South Korea and Turkey.

Profitability and cash flow

Strong core operating results

Group core operating profit increased 7% due to the strong sales performance and productivity measures. The Pharmaceuticals Division's core operating profit increased 9%. Diagnostics core operating profit fell by 5%. This was mainly because of bad debt write-offs in Turkey and Brazil as well as factoring costs related to successful collection of outstanding trade receivables in Southern Europe. The division also recorded higher cost of sales due to substantially more instrument placements.

The Group's core net income rose 6% to 6.0 billion Swiss francs, also reflecting lower financing costs.

Group Core Earnings per Share rose by 8% to 6.94 Swiss francs. The operating free cash flow increased 7% to 7.2 billion Swiss francs, reflecting the continued strong underlying cash generation of the Group.

Restructuring and other non-core items

As announced at the end of June, Roche is restructuring the Pharma Research and Early Development organisation and closing the site in Nutley, New Jersey. The resulting annual savings of 370 million Swiss francs will be largely reinvested in the expanding clinical product pipeline. Associated site closure costs amounted to 858 million Swiss francs in June, of which 446 million is cash relevant.

Roche's Applied Science and Diabetes Care businesses also initiated restructuring measures to sustain their long-term profitability. Roche incurred costs of 289 million Swiss francs for these initiatives.

Further costs of 530 million Swiss francs are a result of other global restructuring plans, including costs related to the termination of the dalcetrapib clinical programme.

Due to these one-time costs, net income decreased by 14% on an IFRS basis. See *Global restructuring plans* on pages 16–17 for more details.

Outlook

Full-year targets confirmed

Roche confirms its full-year outlook for 2012. Barring unforeseen events, Roche expects low to mid-single-digit sales growth at constant exchange rates for the Group and the Pharmaceuticals Division in 2012. Sales by the Diagnostics Division are expected to again outpace the market. Despite a challenging market environment, based on the expected sales growth and continued efficiency improvements, Roche is aiming for a high single-digit increase in Core Earnings per Share at constant exchange rates. Roche will continue its attractive dividend policy.

Product and pipeline update

The Group strengthened its leading position in the global oncology market by successfully launching breast cancer treatment Perjeta and skin cancer medicine Erivedge in the US as well as melanoma therapy Zelboraf in Europe, Australia, Canada and other countries this year.

Roche continued to make excellent progress in the development of the product pipeline, with positive results in seven out of nine late-stage trials. Despite the recent decision to stop the development of dalcetrapib, the Group remains committed to developing medicines for patients with cardiovascular disease and diabetes due to the high medical need.

Roche's Diagnostics Division expanded its position as market leader and strengthened its portfolio by launching 25 major products in key markets.

Roche is on track to file trastuzumab emtansine (T–DM1), another innovative treatment for HER2-positive metastatic breast cancer, for approval in both the US and Europe in the second half of the year. Data showing encouraging efficacy, safety and quality-of-life results for T–DM1 were presented at the American Society of Clinical Oncology annual conference in June. T–DM1 and recently launched Perjeta are expected to further strengthen Roche's HER2 franchise over the coming years.

Breast cancer is the most common cancer among women globally. Each year about 1.4 million new cases of breast cancer are diagnosed worldwide, and over 450,000 women will die of the disease annually. In HER2-positive breast cancer increased quantities of the human epidermal growth factor receptor 2 (HER2) are present on the surface of the tumour cells. This is known as 'HER2 positivity' and affects approximately 15–20% of women with breast cancer.

Pharmaceuticals

Clinical trial update

- Two studies investigating the new subcutaneous (SC) formulation of MabThera/Rituxan met their primary endpoints: The pivotal phase III SABRINA (BO22334) study and the phase Ib SparkThera (BP22333) study have both shown non-inferior MabThera/Rituxan serum concentration after SC injection compared with MabThera/Rituxan intravenous infusion in follicular lymphoma patients. No new medically relevant safety signals were observed in either trial. Roche will use the data from SABRINA and SparkThera to support discussions with regulatory authorities.
- BEATRICE, a phase III trial of Avastin combined with chemotherapy as adjuvant treatment (following surgery) for patients with triple-negative (HER2-negative, estrogen and progesterone receptor-negative) breast cancer did not meet its primary endpoint of demonstrating a significant improvement in invasive disease-free survival versus adjuvant chemotherapy alone. These data do not impact the approved use of Avastin in metastatic (advanced) HER2-negative breast cancer or its other approved indications.
- The restructuring of Pharma Research and Early Development has led to several portfolio decisions, in particular in the areas of inflammation, virology and metabolism.

Clinical trial highlights

Perjeta – HER2-positive metastatic breast cancer, CLEOPATRA study

- Compound: Perjeta (pertuzumab)
- Disease: HER2-positive metastatic breast cancer
- Trial: CLEOPATRA, phase III
- Primary endpoint: Progression-free survival (PFS)
- Secondary endpoints: Overall survival, PFS by investigator assessment, safety profile, overall response rate (ORR), duration of response and time to symptom progression

The CLEOPATRA study showed in June that patients treated with Perjeta as well as Herceptin and docetaxel chemotherapy lived significantly longer than those who were treated with Herceptin and docetaxel chemotherapy only (overall survival). At the end of last year the CLEOPATRA study also showed that patients who were given this combination of therapies lived 6.1 months longer without their disease getting worse (PFS). This outcome was used as the basis for filing in the US, where Perjeta is now being used to fight this particularly aggressive form of breast cancer after its launch in June.

T–DM1 – HER2-positive metastatic breast cancer, EMILIA study

- Compound: T–DM1 (trastuzumab emtansine)
- Disease: HER2-positive metastatic breast cancer
- Trial: EMILIA, phase III
- Co-primary endpoints: Progression-free survival (PFS) and overall survival

The EMILIA trial, which was presented at ASCO in June, is the first randomised phase III study of T–DM1. The study enrolled people with HER2-positive metastatic breast cancer (mBC) who had previously received treatment with Herceptin and a taxane (chemotherapy). The trial showed people who received T–DM1 were 35% less likely to experience a worsening of their disease (PFS) compared to those who received lapatinib plus Xeloda (capecitabine). There was also a trend for patients who received T–DM1 to live longer (overall survival) than those who received lapatinib plus Xeloda, but these data are currently not mature.

Actemra/RoActemra – rheumatoid arthritis, ADACTA study

- Compound: RoActemra (tocilizumab)
- Disease: Rheumatoid arthritis (RA)
- Trial: ADACTA, phase IV
- Primary endpoint: Significantly greater reduction in disease activity score (DAS28) at 24 weeks from baseline in patients receiving RoActemra monotherapy compared to those receiving adalimumab monotherapy.

ADACTA met the primary endpoint. Study results published in June showed that patients who received RoActemra (known as Actemra outside Europe) as monotherapy experienced a significantly greater improvement in disease activity compared to adalimumab – a commonly used anti-TNF therapy – as monotherapy. Patients with RA are often treated with a number of medicines, combining protein-based biologic therapies with methotrexate (MTX). However, about one-third of patients on a biologic treatment like RoActemra receive it as monotherapy, largely due to intolerance to MTX. RA is an autoimmune disease that is estimated to affect up to 70 million people globally, including children. Joints become chronically inflamed, painful and swollen and patients can become increasingly disabled.

Solid pipeline

As of 30 June 2012, the Pharmaceuticals Division's clinical development portfolio included 72 new molecular entities. Full details of Roche's pipeline are available at www.roche.com.

Recently launched products

Zelboraf for BRAF V600 mutated metastatic melanoma

Zelboraf was launched successfully in the US in August last year and in Europe in February this year. In the US Zelboraf is being used as a first-line therapy in approximately 85% of patients with metastatic melanoma who test positive for the BRAF V600E mutation. Early indications suggest uptake in the EU will be similarly strong. Roche has also secured approval in Canada, Australia, New Zealand, Mexico and several other countries. Discussions with regulatory and reimbursement authorities are ongoing.

Erivedge for advanced basal cell carcinoma

Erivedge became the first and only FDA-approved treatment for advanced forms of basal cell carcinoma in February this year. It is also the first in a new class of anti-cancer treatments called hedgehog pathway inhibitors. Early market response is encouraging. Roche has submitted Erivedge for marketing approval in the EU, Australia, Mexico, Israel and Canada.

Perjeta for first-line HER2-positive metastatic breast cancer

Perjeta was approved in the US in June 2012 after FDA-priority review. Upon approval Roche made the product immediately available to patients. Roche and Chugai have also filed for approval in the EU and Japan. Perjeta in combination with Herceptin is likely to shift the standard of care for HER2-positive breast cancer patients.

Pharmaceuticals Division – major clinical and regulatory news flow up to mid-July 2012

Compound	Indication	Milestone	
Actemra	Rheumatoid arthritis DMARD inadequate responders (monotherapy)	Phase III ADACTA H2H vs. adalimumab	Q1 ✓
Actemra	Polyarticular juvenile idiopathic arthritis	Phase III CHERISH	Q1 ✓
Avastin	Metastatic colorectal cancer (treatment across multiple lines)	Phase III TML	Q1 ✓
Erivedge	Advanced basal cell carcinoma	US approval	Q1 ✓
T–DM1	2nd-line HER2+ metastatic breast cancer	Phase III EMILIA	Q1 ✓
Zelboraf	Metastatic melanoma	EU approval	Q1 ✓
Actemra subcutaneous	Rheumatoid arthritis	Phase III SUMMACTA	Q2 ✓
Avastin	Platinum-resistant recurrent ovarian cancer	Phase III AURELIA	Q2 ✓
Dalcetrapib	Atherosclerosis cardiovascular risk red.	Phase III dal-OUTCOMES (2nd interim analysis)	Q2 ×
MabThera subcutaneous	Non-Hodgkin's lymphoma	Phase III SABRINA	Q2 ✓
Perjeta	1st-line HER2+ metastatic breast cancer	US approval	Q2 ✓
Avastin	Triple-negative adjuvant breast cancer	Phase III BEATRICE	Q3 ×

Pharmaceuticals Division – upcoming clinical and regulatory news flow in 2012

Compound	Indication	Milestone	
Actemra	Rheumatoid arthritis DMARD inadequate responders (1L)	US approval	H2
Actemra subcutaneous	Rheumatoid arthritis	Phase III BREVACTA	H2
Avastin	Newly diagnosed glioblastoma	Phase III AVAglio	H2
Avastin	Platinum-sensitive recurrent ovarian cancer	EU approval	H2
Erivedge	Advanced basal cell carcinoma	EU approval	H2 2012/2013
Herceptin	Adjuvant HER2+ breast cancer	Phase III HERA 2 years vs. 1 year	H2
Lucentis	Diabetic macular edema	US approval	H2
Perjeta	1st-line HER2+ metastatic breast cancer	EU approval	H2 2012

Diagnostics

New products

In the first half of 2012 Roche Diagnostics launched 25 major products in key markets (see table on page 11). These allow the early detection, diagnosis and monitoring of a broad range of conditions, helping medical professionals and patients to optimise treatment choices, disease management and costs. Highlights include:

Blood gas analyser for critical care

The FDA approved cobas b 123, a blood gas analyser for use in emergency and intensive care units, operating rooms and laboratories in May. From a drop of blood, the device delivers critical information in less than two minutes, including blood gas, electrolytes, glucose, lactate and bilirubin, that physicians need to be able to make life-saving decisions. It marks an important advance in blood gas testing, the biggest hospital point-of-care segment worth over 1.2 billion US dollars.

Pathology lab automation

Roche strengthened its leadership in pathology lab automation with two new instruments. The BenchMark Special Stains platform enables staining of patient tissue with a variety of dyes to visualise structures and pathogens for the diagnosis of cancers and other diseases. Its complete workflow drives lab efficiency and minimises exposure to lab personnel. The VENTANA iScan HT slide scanner for digital pathology can scan up to 80 tissue slides per hour into high-resolution digital images (20× and 40× magnification). Launched in May and June, both systems contribute to increased lab efficiency, reduced possibility of human error and faster delivery of patient results.

Cervical disease detection

Roche launched the cervical cancer biomarker test p16 Histology in May for worldwide use on its automated tissue diagnostics systems. The test helps more accurately identify cervical disease (dysplasia) and pre-cancer in biopsy samples by detecting overexpression of the protein $p16^{INK4a}$. Roche now offers the broadest spectrum of products for cervical cancer prevention in industry – from gynecologist screening with the human papillomavirus (HPV) DNA test through histopathological diagnosis. Worldwide it is estimated that 450,000 women per year are diagnosed with cervical cancer.

Clinical trials

Roche continues investing in and collaborating on studies to explore and prove the medical benefit of its diagnostics products.

VISION study[3] – Troponin T test identifies mortality risk after surgery

A study published in *JAMA*[4] showed that monitoring postoperative troponin T levels with Roche's Elecsys Troponin T blood test, an established marker for myocardial infarctions, can help identify patients who are at higher risk for 30-day mortality and therefore need extra observation and care after non-cardiac surgery. Every year more than 200 million adults worldwide have major non-cardiac surgery, and over 1 million die within 30 days. The study results are expected to help physicians assess the risk to patients and tailor monitoring and therapy accordingly.

3 VISION = Vascular events In noncardiac Surgery patIents cOhort evaluatioN, ongoing global study with over 40,000 patients.
4 *Journal of the American Medical Association*, June 2012.

Diagnostics Division – major product launches in the first half of 2012

Area	Product name	Description	Market	Quarter
Instruments/devices				
Laboratories	BenchMark Special Stains	Fully automated tissue stainer	WW	Q2
	VENTANA iScan HT	Scanner that enables digital viewing of tissue slides	EU, US	Q2
	cobas p 312	Pre-analytical system (decapping, sorting and archiving)	EU, US	Q1–2
	cobas p 630	Pre-analytical molecular testing system	US	Q1
	cobas IT middleware solution 1.00	Software to control the lab workflow until the test result	EU	Q1
Point of care	cobas b 123	Blood gas analyser for critical care	US	Q2
Diabetes Care	Accu-Chek Nano SmartView	Small, no-code blood glucose meter	US	Q2
	Accu-Chek Mobile	Next-generation strip-free blood glucose meter	EU	Q2
Life sciences	cOmplete ULTRA	Protease inhibitor tablets for use in molecular biology	WW	Q1
	MycoTOOL	Real-time PCR analysis kit for detection of mycoplasma	WW	Q1
Tests/assays				
Oncology	p16 Histology	IHC tissue test for cervical disease early detection	WW	Q2
	EGFR, MYC, FGFR1, Chromosome 7 and 8	ISH probes for the detection of genes in tissue samples	WW	Q1
	Ki-67, PR and p53 Algorithms	Image analysis applications for antigens Ki-67, PR and p53, support breast cancer diagnosis	US	Q1–2
	GS GType TET2/CBL/KRAS and RUNX1 Primer Sets	Gene sequencing primer sets for leukemia research	WW	Q1
Virology/ infectiology	HCV II	Immunoassay to detect hepatitis C infections	EU	Q1
	HBc IgM	Immunoassay to detect hepatitis B infections	US	Q1
	CT/NG	PCR test to detect chlamydia and gonorrhoea infections	US	Q1
	HIV-1, v2.0	PCR dual-target test to measure HIV viral load	US	Q2
Metabolism	Accu-Chek Aviva/Performa	Require users to insert a code chip into their meter only once, with ongoing calibration of subsequent test strips	WW	Q2

Diagnostics Division – key product launches planned for the second half of 2012

Area	Product name	Description	Market
Instruments/devices			
Laboratories	cobas t 611	Coagulation analyser for mid- and high-throughput testing	EU
Point of care	cobas b 101	Multi-blood lipid and glucose point-of-care analyser	EU
Diabetes Care	Accu-Chek Combo	Combined insulin pump and blood glucose meter	US
	SOLO Micropump	Insulin micropump with blood glucose meter	EU
Tests/assays			
Oncology	HE4	Immunoassay for early ovarian cancer detection	US
	ER	IHC tissue test for diagnosis of breast cancer	US
Virology	CMV	PCR test to monitor cytomegalovirus infections	US
Metabolism	Vitamin D	Immunoassay, measures vitamins D2 and D3	US

black type = new product/first market launch, grey type = new product/launch in additional markets.
EU = European Union; US = United States; WW = worldwide.

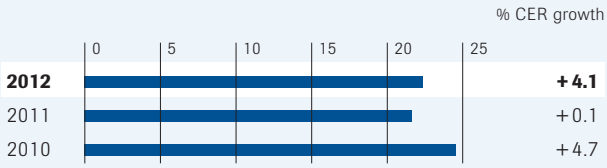
ER = estrogen receptor; GS = Genome Sequencer; HE4 = human epididymis secretory protein E4; HIV = human immunodeficiency virus; IHC = immunohistochemistry; ISH = *in situ* hybridisation; p16 = protein $p16^{INK4a}$; PCR = polymerase chain reaction.

FINANCE

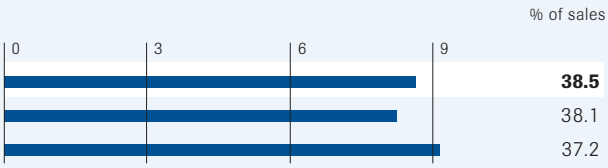
Financial Review

Group results

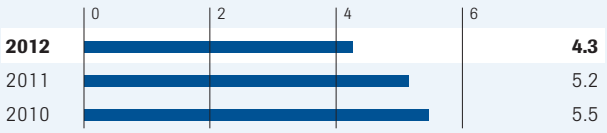
Sales in billions of CHF



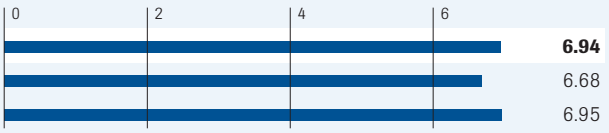
Core operating profit in billions of CHF



Net income attributable to Roche shareholders in billions of CHF



Core EPS in CHF



The Roche Group's results for the first half of 2012 showed growth in its core operating activities, with sales up by 4% and core operating profit up by 7% at constant exchange rates. Sales volume increases more than offset pricing pressures in many markets, and costs were held at the necessary levels to support the future development of the business, notably for research and development which increased by 3%. This strong operating performance combined with lower financing costs, partially offset by a slightly higher tax rate, is responsible for an increase in Core EPS of 8% at constant exchange rates. Operating free cash flow grew at 7% to 7.2 billion Swiss francs or 32% of sales.

During 2012 the Group has initiated a number of major restructuring initiatives to position the business for the future, notably in the Pharmaceuticals Division's research and development organisation with the announcement of the closure of the Nutley site in the US. In Diagnostics, the division initiated global programmes in the Applied Science and Diabetes Care business areas to address long-term profitability by focussing on fewer businesses and products and by consolidating operations. The cost of these restructuring activities, together with a number of other one-time items, resulted in a decrease in net income on an IFRS basis of 14% at constant exchange rates.

Sales in the Pharmaceuticals Division rose by 4%, led by 8% growth in the oncology portfolio with half-yearly sales of over 10 billion Swiss francs. The key growth drivers were Herceptin, MabThera/Rituxan and Pegasys, with Avastin returning to growth. Emerging markets showed growth of 13%, led by 24% sales growth in China. Diagnostics sales grew at 5%, consolidating the division's leading market position. The major growth areas were Professional Diagnostics and Tissue Diagnostics, while sales in Diabetes Care and Applied Science both declined.

Core operating profit increased by 7%, with the Pharmaceuticals Division growing at 9% while Diagnostics fell by 5%. Both divisions showed increases in marketing and distribution costs driven by investments in key markets, notably in the US and China. There were also increases in factoring costs for both divisions, which resulted in improved cash collections, especially in Southern Europe. The profitability in Pharmaceuticals benefited from a decrease in cost of sales from productivity improvements and strict prioritisation of research and development programmes. In Diagnostics profitability in the interim 2012 results was affected by bad debt write-offs and higher cost of sales from substantially higher instrument placements.

Operating free cash flow was 7.2 billion Swiss francs, an increase of 7% compared to the first half of 2011. This reflects the continued strong underlying cash generation of the Group's operations while it makes the necessary investments to develop the business. The increase in free cash outflow was primarily due to the increased annual dividend payments of 5.9 billion Swiss francs and higher tax payments more than offsetting the higher operating free cash flow.

In the first half of 2012, the Swiss franc was stronger compared to the first half of 2011 for many currencies including the euro, but weakened against some others, notably the US dollar and Japanese yen. The overall impact is slightly negative on the results expressed in Swiss francs compared to constant exchange rates.

Income statement

	Six months ended 30 June 2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	22,423	21,671	+3	+4
Royalties and other operating income	880	796	+11	+8
Cost of sales	(6,048)	(6,098)	–1	–1
Marketing and distribution	(4,104)	(3,858)	+6	+7
Research and development	(4,958)	(3,985)	+24	+23
General and administration	(1,861)	(1,066)	+75	+72
Operating profit	**6,332**	**7,460**	**–15**	**–13**
Associates	(2)	–	–	–
Financial income	239	373	–36	–36
Financing costs	(1,058)	(1,165)	–9	–10
Profit before taxes	**5,511**	**6,668**	**–17**	**–15**
Income taxes	(1,143)	(1,409)	–19	–18
Net income	**4,368**	**5,259**	**–17**	**–14**
Attributable to				
– Roche shareholders	4,255	5,151	–17	–14
– Non-controlling interests	113	108	+5	–1
Diluted EPS (CHF)	4.99	6.04	–17	–13
Core results				
Sales	22,423	21,671	+3	+4
Royalties and other operating income	880	796	+11	+8
Cost of sales	(5,666)	(5,659)	0	0
Marketing and distribution	(4,005)	(3,839)	+4	+5
Research and development	(4,043)	(3,873)	+4	+3
General and administration	(948)	(845)	+12	+11
Operating profit	**8,641**	**8,251**	**+5**	**+7**
Associates	(2)	–	–	–
Financial income	239	373	–36	–36
Financing costs	(1,058)	(1,165)	–9	–10
Profit before taxes	**7,820**	**7,459**	**+5**	**+7**
Income taxes	(1,785)	(1,638)	+9	+10
Net income	**6,035**	**5,821**	**+4**	**+6**
Attributable to				
– Roche shareholders	5,922	5,697	+4	+7
– Non-controlling interests	113	124	–9	–13
Core EPS (CHF)	6.94	6.68	+4	+8

Sales

In the first half of 2012 sales increased by 4% at constant exchange rates (+3% in Swiss francs; +1% in US dollars) to 22.4 billion Swiss francs. Sales in the Pharmaceuticals Division rose 4% with Herceptin, MabThera/Rituxan, Pegasys, Actemra/RoActemra, Xeloda and Zelboraf growing strongly. Avastin also returned to growth with a 3% increase in sales. These positive results were partially offset by the continued decline in Bonviva/Boniva and CellCept sales from generic erosion following patent expiry and NeoRecormon/Epogin due to competition from biosimilars. Emerging market sales in Pharmaceuticals grew by 13%, led by 24% in China, and now represent over 10% of the division's sales. The Diagnostics Division recorded sales of 5.0 billion Swiss francs, an increase of 5% at constant exchange rates, consolidating its leading market position. The major growth area was Professional Diagnostics, which represents half of the division's sales and grew by 9%. Tissue Diagnostics (+17%) also showed strong growth, while Diabetes Care sales decreased by 2% and Applied Science sales declined by 3%.

Divisional operating results for the six months ended 30 June 2012

	Pharmaceuticals (mCHF)	Diagnostics (mCHF)	Corporate (mCHF)	Group (mCHF)
Sales	17,409	5,014	–	22,423
Core operating profit	7,889	998	(246)	8,641
– margin, % of sales	45.3	19.9	–	38.5
Operating profit	6,438	464	(570)	6,332
– margin, % of sales	37.0	9.3	–	28.2
Operating free cash flow	6,639	793	(262)	7,170
– margin, % of sales	38.1	15.8	–	32.0

Divisional operating results – Development of results compared to the six months ended 30 June 2011

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales				
– % increase CER	+4	+5	–	+4
Core operating profit				
– % increase CER	+9	–5	+24	+7
– margin: percentage point change	+2.1	–2.0	–	+1.0
Operating profit				
– % increase CER	–3	–44	+178	–13
– margin: percentage point change	–2.8	–8.0	–	–5.6
Operating free cash flow				
– % increase CER	+5	+30	+10	+7
– margin: percentage point change	+0.4	+3.0	–	+0.8

Core operating results

On a core basis, the Group's operating profit increased by 7% at constant exchange rates (5% in Swiss francs), while sales increased by 4% at CER (3% in Swiss francs). The Group's core operating profit margin improved by 1.0 percentage points to 38.5% of sales, with the Pharmaceuticals Division increasing by 2.1 percentage points and Diagnostics Division decreasing by 2.0 percentage points. Currency translation did not have a strong impact on the operating results compared to prior periods, with a negative effect of 0.6 percentage points on Group core operating margin, 0.7 percentage points for the Pharmaceuticals Division and no impact for the Diagnostics Division.

Pharmaceuticals Division. The division increased its core operating profit by 9% in constant currencies, driven by growth of the underlying business with a 4% increase in sales, an improved gross profit margin and cost savings. Core research and development costs were held at a 3% increase, while there was an increase of general and administration in part due to the relatively low spending at Chugai in the prior year following the East Japan Earthquake.

Diagnostics Division. Core operating profit was down 5%, with the 5% sales increase more than offset by higher operating expenses, notably from write-offs of bad debts in Turkey and Brazil, factoring costs and higher cost of sales arising from increased instrument placements and related installation costs. General and administration costs increased due to informatics projects and the roll-out of Finance Shared Service Centres. As described below, the division has initiated global restructuring plans to address the long-term profitability of the Applied Science and Diabetes Care business areas.

Global restructuring plans

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

Global restructuring plans: costs incurred in millions of CHF

	Pharma R&D [1]	Diagnostics [2]	Pharma Informatics	Other plans [3]	Total
Six months ended 30 June 2012					
Global restructuring costs					
– Employee-related costs	194	67	49	75	385
– Site closure costs	367	15	–	110	492
– Other reorganisation expenses	10	12	–	184	206
Total global restructuring costs	**571**	**94**	**49**	**369**	**1,083**
Additional costs					
– Impairment of goodwill	–	185	–	–	185
– Impairment of intangible assets	45	10	–	112	167
– Legal and environmental costs	242	–	–	–	242
Total costs	**858**	**289**	**49**	**481**	**1,677**

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

Pharmaceuticals Division – Research and Development reorganisation. On 26 June 2012 the Group announced a streamlining of the research and development activities within the Pharmaceuticals Division. As part of this plan the US site in Nutley, New Jersey, will be closed by the end of 2013, with a reduction in the workforce of approximately 1,000 people. The research and development activities currently undertaken at Nutley will be consolidated at existing sites in Switzerland and Germany and at the planned Translational Clinical Research Center in the US. The resulting savings from the global site consolidation and related infrastructure costs, the bundling of support functions as well as shifts in the portfolio will allow the reallocation of resources to the growing number of clinical programmes. During the interim period costs of 571 million Swiss francs were incurred, based on initial estimates of the cost of the reorganisation. Of this amount, 194 million Swiss francs were provisions for severance payments and other employee-related costs, net of estimated pension curtailment gains. A charge of 367 million Swiss francs was recorded for impairments of property, plant and equipment at the Nutley site. In addition to these restructuring costs, environmental remediation costs of 242 million Swiss francs were recorded based on the initial estimates of the additional remediation activities that may be needed before the Nutley site can be sold. Impairment charges to intangible assets of 45 million Swiss francs were recorded as a result of portfolio prioritisation decisions linked to this reorganisation.

Diagnostics Division – Applied Science and Diabetes Care restructuring. Initiatives were announced in 2012 for the Applied Science and Diabetes Care businesses, which include streamlining the product portfolio and increasing the efficiency of marketing and distribution operations and research and development activities. In total, costs of 94 million Swiss francs were incurred in the first half of 2012, which relate to employee termination and site closure costs. In addition, goodwill impairment charges of 185 million Swiss francs were incurred for the full write-off of the goodwill from the 2007 NimbleGen acquisition, resulting from the decision to exit the microarray business as part of the reorganisation of the Applied Science business area.

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

Other global restructuring plans. During the interim period costs of 239 million Swiss francs were incurred for the previously announced Operational Excellence programme, mainly for employee-related costs for sales force restructuring initiatives in the Pharmaceutical Division and employee-related and site closure costs in the Diagnostics Division for the sites in Burgdorf, Switzerland and Graz, Austria. In the second quarter of 2012 the Pharmaceuticals Division initiated a detailed review following the announcement of the results of the second interim analysis of the dalcetrapib dal-OUTCOMES Phase III trial and the subsequent termination of the dal-OUTCOMES trial and all the studies in the dal-HEART programme. In the interim results restructuring costs of 130 million Swiss francs were incurred, which consist of provisions for remaining trial costs and write-offs of inventories and property, plant and equipment. Additionally 112 million Swiss francs were expensed for the write-off of previously acquired intangible assets.

Impairment of goodwill and intangible assets

In the interim period impairment charges for goodwill and intangible assets were 185 million Swiss francs and 477 million Swiss francs, respectively, the majority of which was incurred for the various global restructuring initiatives as described above. In addition, unrelated to global restructuring plans, further impairment charges of 310 million Swiss francs were recorded. The major elements of this amount are charges of 103 million Swiss francs following from a portfolio prioritisation decision by the Pharmaceuticals Division, which relates to a decision to return the global rights to the monoclonal antibody RG 7334 anti-PLGF MAb to the alliance partners, and charges of 160 million Swiss francs follow from the latest clinical data assessment of a project acquired as part of the Marcadia acquisition.

Legal and environmental settlements

In addition to the environmental remediation costs of 242 million Swiss francs for the Nutley site mentioned above, a further 95 million Swiss francs of legal and environmental costs were recorded, unrelated to global restructuring plans. These are mainly for the estimated additional remediation costs of a landfill site near Grenzach, Germany, that was previously used by manufacturing operations that were closed some years ago.

Treasury and taxation

Financial income was 0.2 billion Swiss francs, a decrease of 36% mainly due to a normalisation in the foreign currency result after the unusually high devaluation-related foreign exchange gains recorded in Venezuela in the first half of 2011. Financing costs were 1.1 billion Swiss francs, a decrease of 107 million Swiss francs, with interest costs being 10% lower at constant exchange rates as debt was repaid. Core tax expenses increased by 10% to 1.8 billion Swiss francs and the Group's effective core tax rate increased to 22.8% compared to 22.0% in the first half of 2011 mainly as a consequence of the higher percentage of core profit contribution coming from the US, which has a relatively higher local tax rate than the average Group rate, and the non-renewal of the US research and development tax credit rules so far in 2012.

Net income and Earnings per share

Net income decreased by 14% and diluted EPS decreased by 13% at constant exchange rates with the strong core operating performance more than offset by costs of the various global restructuring plans. On a core basis, which excludes non-core items such as global restructuring costs and amortisation and impairment of goodwill and intangible assets, net income was 6% higher and Core EPS 8% higher, driven by a strong operating performance and lower financing costs. This was partially offset by a higher tax rate.

Supplementary net income and EPS information is given on pages 72–75. This includes calculations of Core EPS and reconciles the Core results to the Group's published IFRS results.

Financial position

	30 June 2012 (mCHF)	31 December 2011 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals				
Net working capital	6,472	5,445	+19	+18
Long-term net operating assets	13,500	14,563	–7	–8
Diagnostics				
Net working capital	3,594	3,501	+3	+3
Long-term net operating assets	11,750	12,022	–2	–3
Corporate				
Net working capital	1	(42)	–	–
Long-term net operating assets	(330)	2	–	–
Net operating assets	**34,987**	**35,491**	**–1**	**–2**
Net debt	(17,333)	(15,566)	+11	+10
Pensions	(6,104)	(4,952)	+23	+24
Income taxes	912	174	+424	Over +500
Other non-operating assets, net	(386)	(665)	–42	–43
Total net assets	**12,076**	**14,482**	**–17**	**–16**

During the first half of 2012 the Swiss franc slightly weakened against many currencies, most importantly against the US dollar. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc has been stable against the euro during 2012.

In the Pharmaceuticals Division net working capital increased significantly by 18% at constant exchange rates. Inventories increased by 9% mainly due to inventory building to meet higher sales demand and in support of patient access programmes. Trade receivables declined slightly, with the impacts of continued sales growth being offset by the collection of outstanding receivables, notably in Southern Europe. Payables decreased as a result of the settlement of significant year-end accounts payable and accruals, including employee benefits and lower levels of accrued royalties. Long-term net operating assets decreased by 8% mainly due to the impact of global restructuring plans and lower intangible assets. In Diagnostics the increase in net working capital of 3% was driven by higher inventory levels due to product launches and decreases in payables due to the settlement of year-end accruals. The long-term net operating assets decreased by 3% as intangible assets decreased slightly and provisions for restructuring costs have been created.

The increase in the net debt position was mainly due to the annual dividend payments of 5.9 billion Swiss francs and higher tax payments which more than offset the higher operating free cash flow. The net pension liabilities increased by 1.2 billion Swiss francs due to continuing low interest rates increasing the discounted defined benefit obligation. The net tax assets increased mainly due to the deferred tax effect of this increase in net pension liabilities. Other non-operating net assets increased by 0.3 billion Swiss francs due to a decrease in interest payables.

Free cash flow

	Six months ended 30 June 2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
Pharmaceuticals	6,639	6,476	+3	+5
Diagnostics	793	617	+29	+30
Corporate	(262)	(237)	+11	+10
Operating free cash flow	**7,170**	**6,856**	**+5**	**+7**
Treasury activities	(1,147)	(1,048)	+9	+7
Taxes paid	(1,481)	(1,086)	+36	+36
Dividends paid	(5,851)	(5,689)	+3	+3
Free cash flow	**(1,309)**	**(967)**	**+35**	**+14**

The Group's operating free cash flow for the first six months of 2012 was 7.2 billion Swiss francs, with the 7% increase in core operating profit feeding through to a 7% increase in operating free cash flow. Cash generation in the Pharmaceuticals Division increased by 5% to 6.6 billion Swiss francs as the strong operating results were partially offset by increases in net working capital from the inventory investments and settlement of year-end payables described above. Diagnostics operating free cash flow increased significantly due to improved collection of trade receivables and factoring initiatives in Southern European countries. The free cash flow in the first half of 2012 shows an increased cash outflow of 0.3 billion Swiss francs to a cash outflow of 1.3 billion Swiss francs. This was primarily due to higher annual dividend and tax payments more than offsetting the higher operating free cash flow.

Pharmaceuticals operating results

Pharmaceuticals Division interim operating results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	17,409	16,815	+4	+4
Royalties and other operating income	802	746	+8	+5
Cost of sales	(3,640)	(3,846)	–5	–7
Marketing and distribution	(2,791)	(2,681)	+4	+4
Research and development	(4,472)	(3,543)	+26	+25
General and administration	(870)	(671)	+30	+28
Operating profit	**6,438**	**6,820**	**–6**	**–3**
– margin, % of sales	37.0	40.6	–3.6	–2.8
Core results [1]				
Sales	17,409	16,815	+4	+4
Royalties and other operating income	802	746	+8	+5
Cost of sales	(3,486)	(3,607)	–3	–5
Marketing and distribution	(2,751)	(2,665)	+3	+3
Research and development	(3,587)	(3,442)	+4	+3
General and administration	(498)	(462)	+8	+6
Core operating profit	**7,889**	**7,385**	**+7**	**+9**
– margin, % of sales	45.3	43.9	+1.4	+2.1
Financial position				
Net working capital	6,472	5,445	+19	+18
Long-term net operating assets	13,500	14,563	–7	–8
Net operating assets	**19,972**	**20,008**	**0**	**–1**
Free cash flow				
Operating free cash flow	6,639	6,476	+3	+5
– margin, % of sales	38.1	38.5	–0.4	+0.4

1) See pages 72–75 for definition of Core results and Core EPS.

Sales overview

Pharmaceuticals Division – Interim sales by therapeutic area

Therapeutic area	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Oncology	10,524	9,804	+8	60	58
Virology	1,572	1,402	+12	9	8
Inflammation/Autoimmune/Transplantation	1,476	1,421	+4	8	9
Metabolism/Bone	800	1,064	–26	5	6
Ophthalmology	745	769	–5	4	5
Respiratory diseases	602	547	+9	3	3
Cardiovascular diseases	483	470	+1	3	3
Central nervous system	443	446	+2	3	3
Renal anemia	433	513	–16	3	3
Infectious diseases	178	178	0	1	1
Other therapeutic areas	153	201	–23	1	1
Total sales	**17,409**	**16,815**	**+4**	**100**	**100**

Pharmaceuticals Division sales increased 4% at constant exchange rates, with growth in most key products offsetting negative impacts from pricing pressures as well as expected decreases in sales of certain major medicines. Sales growth was primarily driven by six products: Herceptin, MabThera/Rituxan, Pegasys, Actemra/RoActemra, Xeloda and Zelboraf. These products represent 48% of the portfolio (2011: 44%) and together generated 1 billion Swiss francs of additional sales in the first half of 2012. This growth was partly offset by lower sales of Bonviva/Boniva, NeoRecormon/Epogin, CellCept, Xenical and Tamiflu.

Oncology continued to account for the majority of the division's sales, with continued growth in Herceptin and MabThera/Rituxan and a return to growth for Avastin. The recently launched Zelboraf was also a significant growth contributor. In virology, Pegasys continued the growth seen in the second half of 2011 while sales of Tamiflu continued to decline. Sales in inflammation/autoimmune/transplantation increased 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 – Interim sales

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Oncology					
Herceptin	2,951	2,716	+11	17	16
Avastin	2,805	2,726	+3	16	16
MabThera/Rituxan [1]	2,780	2,565	+9	16	15
Xeloda	763	668	+14	4	4
Tarceva	666	614	+8	4	4
Neutrogin	125	135	–12	1	1
NeoRecormon/Epogin [2]	95	118	–16	1	1
Zelboraf	92	–	–	0	n/a
Others	247	262	–26	1	1
Total Oncology	**10,524**	**9,804**	**+8**	**60**	**58**
Virology					
Pegasys	903	695	+31	5	4
Valcyte/Cymevene	307	282	+9	2	2
Tamiflu	221	262	–18	1	2
Copegus	75	96	–20	1	0
Others	66	67	+3	0	0
Total Virology	**1,572**	**1,402**	**+12**	**9**	**8**
Inflammation/Autoimmune/Transplantation					
MabThera/Rituxan [1]	535	491	+9	3	3
CellCept	454	538	–15	3	3
Actemra/RoActemra	385	277	+39	2	2
Others	102	115	–15	0	1
Total Inflammation/Autoimmune/ Transplantation	**1,476**	**1,421**	**+4**	**8**	**9**
Metabolism/Bone					
Bonviva/Boniva	207	394	–46	1	2
Nutropin	154	169	–11	1	1
Evista	89	93	–9	1	0
Xenical	62	131	–52	0	1
Others	288	277	0	2	2
Total Metabolism/Bone	**800**	**1,064**	**–26**	**5**	**6**
Ophthalmology					
Lucentis	745	769	–5	4	5
Total Ophthalmology	**745**	**769**	**–5**	**4**	**5**
Respiratory diseases					
Xolair	345	300	+12	2	2
Pulmozyme	257	247	+4	1	1
Total Respiratory diseases	**602**	**547**	**+9**	**3**	**3**

Pharmaceuticals Division – Interim sales *(continued)*

	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Cardiovascular diseases					
Activase/TNKase	285	231	+21	2	1
Others	198	239	–18	1	2
Total Cardiovascular diseases	**483**	**470**	**+1**	**3**	**3**
Central nervous system					
Madopar	157	150	+8	1	1
Rivotril	101	100	+6	1	1
Others	185	196	–4	1	1
Total Central nervous system	**443**	**446**	**+2**	**3**	**3**
Renal anemia					
NeoRecormon/Epogin [2]	256	375	–32	2	2
Mircera	177	138	+30	1	1
Total Renal anemia	**433**	**513**	**–16**	**3**	**3**
Infectious diseases					
Rocephin	133	130	+2	1	1
Others	45	48	–3	0	0
Total Infectious diseases	**178**	**178**	**0**	**1**	**1**
Other therapeutic areas	**153**	**201**	**–23**	**1**	**1**
Total sales	**17,409**	**16,815**	**+4**	**100**	**100**

1) Total MabThera/Rituxan sales of 3,315 million Swiss francs (2011: 3,056 million Swiss francs) split between oncology and Inflammation/Autoimmune/Transplantation franchises.
2) Total NeoRecormon/Epogin sales of 351 million Swiss francs (2011: 493 million Swiss francs) split between renal anemia and oncology franchises.

MabThera/Rituxan. For non-Hodgkin's lymphoma (NHL), chronic lymphocytic leukemia (CLL) and rheumatoid arthritis (RA). Sales growth in the oncology franchise of 9% was driven by the uptake of the new first-line maintenance indication in follicular lymphoma (a type of NHL) in the US and Europe. US sales were 1.6 billion Swiss francs, an increase of 8%, while sales in Western Europe were up by 6%. Sales grew by 13% in the International region, particularly in China and Brazil, due to growth in all NHL and CLL indications. Sales growth in the RA franchise was 9%, with continued positive impact from increased use in patients who have responded inadequately to treatment with tumour necrosis factor inhibitors.

Herceptin. For HER2-positive breast cancer and HER2-positive metastatic (advanced) stomach cancer. Sales grew in all regions except Japan, and particularly in the International region, where sales grew by 22% to 985 million Swiss francs. US sales were 816 million Swiss francs, an increase of 10%. In Western Europe, Herceptin is the Group's leading product with sales of 992 million Swiss francs, an increase of 3%. Global growth was mainly due to expanded access in developing countries, increased use in previously untreated breast cancer patients, uptake in the stomach cancer indication and improved HER2 testing.

Avastin. For advanced colorectal, breast, lung and renal cancer, and for relapsed glioblastoma (a type of brain tumour). Global sales recovered from the decline in 2011 and increased by 3% compared to the first half of 2011. Sales in the United States were 1.2 billion Swiss francs, down by 2%, which was more than offset by growth in the International region (+15%), in Japan (+12%) and in Western Europe (+2%). Growth was driven mainly by increased use in lung and colorectal cancer as well as the recently approved use in ovarian cancer. In the US the slight decline reflected lower wholesaler inventories at the end of June 2012 and lower use in breast cancer compared to the first half of 2011.

Lucentis. For wet age-related macular degeneration (AMD) and macular edema following retinal vein occlusion (RVO). US sales declined by 5% to 745 million Swiss francs. Share of sales for the RVO indication was stable, while the share of sales for AMD declined modestly due to the increasingly competitive environment.

Pegasys. For hepatitis B and C. Sales increased by 31% to 903 million Swiss francs. This was mainly due to increasing demand in the US, where sales increased by 122%, for Pegasys in triple-combination therapy with new direct-acting hepatitis C antivirals and ribavirin. As the leading pegylated interferon, Pegasys has established itself as a key component of this new treatment regimen, further expanding its market share.

Other products. Actemra/RoActemra sales increased by 39%, with growth in all regions driven by positive clinical results supporting the effectiveness in monotherapy treatment. The renal anemia medication Mircera grew by 30%, driven by strong demand in Japan following the launch in July 2011. There were lower sales of the more established anemia medicines, Roche's NeoRecormon and Chugai's Epogin. CellCept and Bonviva/Boniva sales continued to decline in the US, Western Europe and the International region due to further generic erosion following patent expiry. Uptake of Zelboraf in the US and Western Europe continued with sales of 92 million Swiss francs. During the first half of 2012 Zelboraf received marketing approvals in the EU, Canada, Australia, New Zealand, Mexico and several other countries.

Pharmaceuticals Division – Interim sales by region

Region	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
United States	6,815	6,285	+6	39	37
Western Europe	4,000	4,299	–3	23	26
Japan	1,943	1,831	+1	11	11
International	4,651	4,400	+8	27	26
– CEMAI [1)]	*1,626*	*1,566*	*+9*	*9*	*9*
– Latin America	*1,299*	*1,213*	*+13*	*8*	*7*
– Asia–Pacific	*1,291*	*1,108*	*+13*	*7*	*7*
– Other regions	*435*	*513*	*–15*	*3*	*3*
Total sales	**17,409**	**16,815**	**+4**	**100**	**100**

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

United States. Sales grew by 6% in US dollar terms. The leading products were the oncology medicines MabThera/Rituxan, Avastin and Herceptin, with sales of 1.6 billion Swiss francs (+8%), 1.2 billion Swiss francs (–2%) and 0.8 billion Swiss francs (+10%), respectively. Of the other products, growth drivers were Pegasys, Xeloda, Zelboraf, Activase/TNKase and Actemra/RoActemra. These increases more than offset the expected declines in Bonviva/Boniva, Tamiflu, Lucentis and CellCept.

Western Europe. Sales decreased by 3% in constant currencies, being impacted by continuing pricing pressures. There was growth from the oncology products MabThera/Rituxan, Herceptin and Avastin (up 6%, 3% and 2% respectively for total sales of 2.5 billion Swiss francs) and from the successful launch of Zelboraf and the further uptake of Actemra/RoActemra. This was more than offset by the continuing impact of generic erosion on Bonviva/Boniva and CellCept sales and lower sales of NeoRecormon in the highly competitive renal anemia market.

Japan. Sales grew by 1% in Japanese yen terms. The major growth drivers were Avastin with sales of 345 million Swiss francs, up by 12%, and the launch of Mircera with 88 million Swiss francs of sales. There was also growth in MabThera/Rituxan (+12%) and Tamiflu, offset by lower sales of Epogin (–53%).

International. Sales increased by 8% driven by Latin America, Asia–Pacific and CEMAI sub-regions. Growth in Latin America was mainly due to the oncology products, especially Herceptin (+27%) and Xeloda (+21%), and also Pegasys (+100%). Sales growth in Brazil was partly offset by Mexico, where there was a continuing negative impact from biosimilar competition. Asia–Pacific growth was driven by increases in MabThera/Rituxan (+16%) and Herceptin (+10%). China was the main driver in this region, with overall sales growth of 24%. Sales growth in the CEMAI sub-region was mainly due to increased Herceptin, MabThera/Rituxan and Avastin sales. Total sales in the E7 key emerging markets grew by 13%. The sales decline in Russia is due to the timing of tender sales, which in 2011 were concentrated in the first half of the year, whereas in 2012 these are expected to happen mainly in the second half of the year.

Pharmaceuticals Division – Interim sales for E7 leading emerging markets

Country	2012 (mCHF)	2011 (mCHF)	% change (CER) total	% of sales (2012)	% of sales (2011)
Brazil	515	470	+22	3	3
China	604	460	+24	3	3
India	49	42	+17	0	0
Mexico	188	231	–11	1	1
Russia	133	184	–27	1	1
South Korea	111	83	+35	1	1
Turkey	151	142	+19	1	1
Total sales	**1,751**	**1,612**	**+13**	**10**	**10**

Operating results

Royalties and other operating income. The constant currency increase of 5% was due to higher income from royalties and product disposals. This disposal income came from the disposal of Rocaltrol ampoules in Japan and rights for Ostac in certain markets. These increases were partly offset by lower income from out-licensing agreements.

Pharmaceuticals Division – Royalties and other operating income for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Royalty income	662	560	+16
Income from out-licensing agreements	15	93	–85
Income from disposal of products and other	125	93	+31
Total – IFRS and Core basis	**802**	**746**	**+5**

Cost of sales. Core costs decreased by 5% at constant exchange rates due to lower manufacturing costs and royalty expenses. As a percentage of sales, cost of sales declined to 20.0% (2011: 21.5%). The 4% decrease in manufacturing cost of goods sold and period costs was mainly due to network and productivity improvements, and product mix effects. Royalty expenses were 21% lower driven by lower royalty expenses related to sales of Bonviva/Boniva, CellCept and Tamiflu. Expenses from collaboration and profit-sharing agreements increased mainly driven by higher co-promotion expenses due to higher sales of MabThera/Rituxan, Tarceva and Xolair. Global restructuring costs relate mostly to write-offs of property, plant and equipment and other manufacturing costs related to the dalcetrapib trial termination.

Pharmaceuticals Division – Cost of sales for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(2,078)	(2,133)	–4
Royalty expenses	(624)	(792)	–21
Collaboration and profit-sharing agreements	(775)	(685)	+11
Restructuring expenses	–	1	–
Impairment of property, plant and equipment	(9)	2	–
Cost of sales – Core basis	**(3,486)**	**(3,607)**	**–5**
Global restructuring plans	(66)	(78)	–14
Amortisation of intangible assets	(75)	(69)	+5
Impairment of intangible assets	(13)	(32)	–60
East Japan Earthquake	–	(60)	–
Total – IFRS basis	**(3,640)**	**(3,846)**	**–7**

Marketing and distribution. Core costs increased at constant exchange rates by 3%. As a percentage of sales, costs were stable at 15.8%. Sales and marketing efforts focussed on supporting continuing growth in emerging markets, the existing oncology portfolio, including the extension of Avastin in the ovarian cancer indication, and the product launches of Zelboraf and Erivedge. The increase was also partly due to factoring and collection-related costs, in particular for Southern Europe. Global restructuring costs of 40 million Swiss francs were recorded, primarily due to sales force restructuring initiatives.

Pharmaceuticals Division – Marketing and distribution for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(2,751)**	**(2,665)**	**+3**
Global restructuring plans	(40)	(15)	+159
East Japan Earthquake	–	(1)	–
Total – IFRS basis	**(2,791)**	**(2,681)**	**+4**

Research and development. Core costs increased by 3% at constant exchange rates. Research and development costs as a percentage of sales were 20.6% in line with 20.5% in the first half of 2011. There were increased investments in central nervous system, mostly due to the ramp-up of phase III studies in bitopertin and ocrelizumab MS. These were partially offset by lower life cycle investments in oncology and metabolism due to the discontinuation of Avastin adjuvant breast cancer studies in 2011 and dalcetrapib in 2012. In addition the Pharmaceuticals Division spent 147 million Swiss francs on the in-licensing of pipeline compounds and technologies, which are capitalised as intangible assets. In total the division spent 3.7 billion Swiss francs on internal and purchased research and development from in-licensing and other alliance deals. The 2012 impairments of intangible assets include 112 million Swiss francs from the decision to stop further development activities on dalcetrapib, 103 million Swiss francs from the returning of the global rights to the monoclonal antibody RG 7334 anti-PLGF MAb to the alliance partners, and also 160 million Swiss francs from the latest clinical data assessment of a project acquired as part of the Marcadia acquisition. In addition, 73 million Swiss francs of impairment charges arose as a result of portfolio prioritisation decisions and following recent clinical data. Global restructuring costs include 165 million Swiss francs of employee-related costs and 73 million Swiss francs of property plant and equipment impairments related to the closure of the Nutley site and 93 million Swiss francs following the dalcetrapib trial termination, which consists of provisions for remaining trial costs and write-offs of inventories.

Pharmaceuticals Division – Research and development for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Research and development – Core basis	**(3,587)**	**(3,442)**	**+3**
Global restructuring plans	(423)	(61)	Over +500
Amortisation of intangible assets	(14)	(8)	+67
Impairment of intangible assets	(448)	(32)	Over +500
Total – IFRS basis	**(4,472)**	**(3,543)**	**+25**

General and administration. Core costs increased by 6% at constant exchange rates. Costs increased relative to the first half of 2011 in part as a result of reduced Chugai spending in the first half of 2011 following the East Japan Earthquake. Other general items also include the costs for the US Branded Pharmaceutical Product Fee ('Excise Tax') of 74 million Swiss francs (2011: 80 million Swiss francs). General and administration expenses as a percentage of sales increased to 2.9% from 2.7%. Global restructuring costs relate to the site closure costs for Nutley, mainly impairments of property, plant and equipment, and the division's global informatics restructuring programme. The release of the provision for contingent consideration from the Marcadia acquisition resulted in a net income for alliance and business combination costs.

Pharmaceuticals Division – General and administration for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(447)	(447)	–1
Restructuring expenses	–	(1)	–
Gains (losses) on disposal of property, plant and equipment	–	1	–
Other general items	(51)	(15)	+209
General and administration – Core basis	**(498)**	**(462)**	**+6**
Global restructuring plans	(400)	(204)	+93
Alliances and business combinations	44	(2)	–
Legal and environmental settlements	(16)	–	–
East Japan Earthquake	–	(3)	–
Total – IFRS basis	**(870)**	**(671)**	**+28**

Roche Pharmaceuticals and Chugai sub-divisional operating results

Pharmaceuticals sub-divisional interim operating results in millions of CHF

	Roche Pharmaceuticals		Chugai		Pharmaceuticals Division	
	2012	2011	2012	2011	2012	2011
Sales						
– External customers	15,466	14,984	1,943	1,831	17,409	16,815
– Within division	426	435	156	101	582	536
Core operating profit	7,423	7,081	419	406	7,889	7,385
– margin, % of sales	48.0	47.3	21.6	22.2	45.3	43.9
Operating profit	6,009	6,616	382	306	6,438	6,820
– margin, % of sales	38.9	44.2	19.7	16.7	37.0	40.6
Operating free cash flow	5,975	5,958	664	518	6,639	6,476
– margin, % of sales	38.6	39.8	34.2	28.3	38.1	38.5

Pharmaceuticals Division total core operating profit and operating profit both include the elimination of 47 million Swiss francs (2011: –102 million Swiss francs) of unrealised inter-company profits between Roche Pharmaceuticals and Chugai.

Sales increased in both sub-divisions. In constant currencies sales and core operating profit of Roche Pharmaceuticals increased significantly despite higher spending in marketing and distribution and research and development. Sales by Chugai were stable, but the Chugai core operating profit declined slightly due to a lower gross margin due to product mix effects, which was only partly offset by lower costs in research and development. The operating free cash flow at Chugai increased significantly mainly as a result of improved net working capital with decreases in accounts receivables and inventories.

Financial position

Pharmaceuticals Division – Net operating assets

	30 June 2012 (mCHF)	31 Dec. 2011 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	8,020	7,861	+2	+1	114	45
Inventories	3,516	3,177	+11	+9	290	49
Payables	(5,064)	(5,593)	–9	–11	596	(67)
Net working capital	**6,472**	**5,445**	**+19**	**+18**	**1,000**	**27**
Property, plant and equipment	11,122	11,586	–4	–5	(568)	104
Goodwill and intangible assets	4,534	4,851	–7	–8	(402)	85
Provisions	(2,436)	(2,124)	+15	+13	(268)	(44)
Other long-term assets, net	280	250	+12	+10	24	6
Long-term net operating assets	**13,500**	**14,563**	**–7**	**–8**	**(1,214)**	**151**
Net operating assets	**19,972**	**20,008**	**0**	**–1**	**(214)**	**178**

The absolute amount of the movement between the 30 June 2012 and 31 December 2011 consolidated balances reported in Swiss francs is split between actual 2012 transactions (translated at average rates for 2011) and the currency translation adjustment (CTA) that arises on consolidation. The 2012 transactions include non-cash movements and therefore the movements in this table are not the same as the amounts shown in the operating free cash flow (which only includes the cash movements). A full consolidated balance sheet is given on page 49 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 77.

Currency translation effects on balance sheet amounts. During the first half of 2012 the Swiss franc slightly weakened against many currencies, most importantly against the US dollar. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc has been stable against the euro during 2012.

Net working capital. The increase of 18% at constant exchange rates was mainly due to an increase in inventories and a decrease in payables. The balance sheet value of inventories increased mainly due to inventory building to meet higher sales demand, patient access programmes, product launches and in support of production transfers between manufacturing facilities. Receivables were relatively stable, with the continued growth of the business in China, Brazil and the CEMAI sub-region offset by strong collection of outstanding receivables from some Southern European countries. Payables decreased in comparison to December 2011 as a result of the settlement of significant year-end accounts payable and accruals, including employee benefits and lower levels of accrued royalties.

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

Free cash flow

Pharmaceuticals Division – Operating free cash flow for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Operating profit – IFRS basis	**6,438**	**6,820**	**–3**
– Depreciation, amortisation and impairment	1,512	851	+75
– Provisions	263	(220)	–
– Equity compensation plans	81	143	–46
– Other	202	343	–41
Operating profit cash adjustments [1]	**2,058**	**1,117**	**+81**
Operating profit, net of operating cash adjustments	**8,496**	**7,937**	**+9**
(Increase) decrease in net working capital			
– Accounts receivable	(69)	(272)	–80
– Inventories	(440)	73	–
– Accounts payable	(719)	(695)	+5
Total (increase) decrease in net working capital	**(1,228)**	**(894)**	**+36**
Investments in property, plant and equipment	(482)	(481)	–1
Investments in intangible assets	(147)	(86)	+67
Operating free cash flow	**6,639**	**6,476**	**+5**
– as % of sales	38.1	38.5	+0.4

1) A detailed breakdown is provided on page 76.

The Pharmaceuticals Division's operating free cash flow increased to 6.6 billion Swiss francs. The increased cash generation from the underlying business was partly offset by increases in net working capital. Increases in accounts receivables were lower as compared to the first half of 2011 as the impact of continued sales growth was offset by strong collections within some Southern European countries. This was offset by an increase in the cash invested in inventories due to the growth in key growth markets, such as Asia–Pacific, especially China, and Latin America. Payables decreased due to settlement of significant year-end accounts payable and accruals including employee benefits and lower levels of accrued royalties.

Diagnostics operating results

Diagnostics Division interim operating results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Sales	5,014	4,856	+3	+5
Royalties and other operating income	78	50	+56	+56
Cost of sales	(2,408)	(2,252)	+7	+9
Marketing and distribution	(1,313)	(1,177)	+12	+14
Research and development	(486)	(442)	+10	+11
General and administration	(421)	(194)	+117	+116
Operating profit	**464**	**841**	**–45**	**–44**
– margin, % of sales	9.3	17.3	–8.0	–8.0
Core results [1]				
Sales	5,014	4,856	+3	+5
Royalties and other operating income	78	50	+56	+56
Cost of sales	(2,180)	(2,052)	+6	+9
Marketing and distribution	(1,254)	(1,174)	+7	+9
Research and development	(456)	(431)	+6	+7
General and administration	(204)	(186)	+10	+10
Core operating profit	**998**	**1,063**	**–6**	**–5**
– margin, % of sales	19.9	21.9	–2.0	–2.0
Financial position				
Net working capital	3,594	3,501	+3	+3
Long-term net operating assets	11,750	12,022	–2	–3
Net operating assets	**15,344**	**15,523**	**–1**	**–2**
Free cash flow				
Operating free cash flow	793	617	+29	+30
– margin, % of sales	15.8	12.7	+3.1	+3.0

1) See pages 72–75 for definition of Core results and Core EPS.

Sales

The Diagnostics business continued to increase sales above the *in vitro* diagnostics (IVD) global market with a growth of 5% at constant exchange rates. Professional Diagnostics, with 9% sales growth, was the main growth contributor led by its Immunodiagnostics business. Tissue Diagnostics sales grew by 17% driven by the advanced staining market. Both business areas grew substantially ahead of their respective markets. Diabetes Care sales decreased by 2% mainly due to reimbursement changes in Europe and difficult market conditions. Sales in Molecular Diagnostics increased by 6% driven by the blood screening segment and HCV monitoring. Applied Science sales decreased by 3% due to increasing competition in sequencing and a slowdown in public research funding.

Diagnostics Division – Interim sales by business area

Business area	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Professional Diagnostics	2,515	2,360	+9	50	49
Diabetes Care	1,260	1,316	–2	25	27
Molecular Diagnostics	571	544	+6	12	11
Applied Science	363	377	–3	7	8
Tissue Diagnostics	305	259	+17	6	5
Total sales	**5,014**	**4,856**	**+5**	**100**	**100**

Professional Diagnostics. Sales were up 9%, growing at almost double the rate of the global market. The business area was the major contributor to divisional performance in all regions, with growth being primarily driven by the immunoassay business (+14%), which now represents 22% of divisional sales. This was supported by the clinical chemistry and coagulation monitoring businesses with growth of 6% and 8% respectively. There were launches of two new immunoassays, HCV II in the EU and HBc IgM in the US. The business also introduced the cobas p 312 pre-analytical system in the EU and US and received FDA approval for the cobas b 123 blood gas analyser in the US.

Diabetes Care. Sales declined by 2% primarily due to reimbursement changes for blood glucose (bG) monitoring supplies in major European and other markets, including Germany, France and Poland. Sales in North America were down slightly by 1% while sales grew in Asia–Pacific (+14%) and Latin America (+12%) driven by the new Accu-Chek portfolio. Recent launches include the Accu-Chek Nano SmartView bG meter in the US and the next-generation Accu-Chek Mobile bG meter in ten European countries and in Australia. In the US the FDA has cleared the Accu-Chek Combo system, an insulin pump/bG meter combination. In 2012 Roche Diabetes Care initiated a restructuring, notably of research and development activities but also including some marketing and manufacturing activities, to sustain long-term profitability.

Molecular Diagnostics. Sales rose 6% with the largest contribution coming from the blood screening business (+12%), mainly from the US, China, Canada, Mexico and smaller EMEA markets. This was supported by virology (+3%), with HCV monitoring having the largest growth contribution. Key products launched in 2011, such as the cobas HPV test (cervical cancer screening) and cobas BRAF test (melanoma patient selection), continued their positive uptake. Roche Molecular Diagnostics signed over 30 new contracts for HPV in the US and a Swedish pilot study for cervical cancer primary screening with Roche's HPV test started this year. FDA approvals were received for three tests for chlamydia/gonorrhea, HIV and cytomegalovirus.

Applied Science. The 3% decline in sales was mainly due to increasing competition in the genomics segment (sequencing and microarrays) which was down 18% and a slowdown in public research funding. This decline was partially offset by continued sales growth of 9% in the Custom Biotech business. In the second quarter of 2012, under a new strategy, Roche Applied Science started to streamline its product portfolio, focusing on fewer segments with market leadership potential or other strategic interest. As a consequence there will be an exit from the NimbleGen microarray business, keeping only the sequence capture products, a streamlining of the cellular analysis portfolio and a consolidation of operations.

Tissue Diagnostics. Sales rose 17%, at around double the rate of the global market, driven by the advanced tissue staining portfolio (+18%). This was supported by the rapid uptake of HER2 Dual ISH, a test for personalised breast cancer therapy, which was launched in summer 2011 in the US. This test has achieved global sales of 90,000 tests within a year and is now a market leader. The business made further progress in its Personalised Healthcare strategy with five new external collaborations (Aeterna Zentaris, Bayer, Pfizer, Seattle Genetics/Millennium and Syndax). Roche Tissue Diagnostics also expanded its leadership in pathology laboratory automation through the launch of the BenchMark Special Stains platform and the VENTANA iScan HT scanner.

Diagnostics Division – Interim sales by region

Region	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Europe, Middle East and Africa (EMEA)	2,365	2,469	+1	47	51
North America	1,281	1,196	+5	25	24
Asia–Pacific	736	615	+17	15	13
Latin America	348	323	+13	7	7
Japan	284	253	+7	6	5
Total sales	**5,014**	**4,856**	**+5**	**100**	**100**

Sales continued to grow in all regions. The Asia–Pacific region achieved strong growth of 17%, driven mainly by Professional Diagnostics. The sales increase in this region was also due to increasing sales in China (+32%), coming from governmental healthcare investments, public demand and Roche's expanding presence and wide portfolio. In North America sales grew by 5% driven by increased business with clinical laboratories, led by Professional Diagnostics. In Latin America the positive performances of Professional Diagnostics and Diabetes Care resulted in a total sales growth of 13%. In EMEA sales increased by 1% as increased sales in Professional Diagnostics and Tissue Diagnostics were partially offset by the decline in Diabetes Care sales from reimbursement changes. Sales in Japan grew by 7%, several times the market rate, mainly driven by Professional Diagnostics.

Diagnostics Division – Interim sales for E7 leading emerging markets

Country	2012 (mCHF)	2011 (mCHF)	% change (CER)	% of sales (2012)	% of sales (2011)
Brazil	114	118	+7	2	2
China	304	217	+32	6	5
India	50	43	+32	1	1
Mexico	49	48	+10	1	1
Russia	84	73	+20	2	2
South Korea	76	68	+13	2	1
Turkey	62	60	+15	1	1
Total sales	**739**	**627**	**+21**	**15**	**13**

Operating results

Royalties and other operating income. Income was 78 million Swiss francs, an increase of 56% at constant exchange rates driven by higher royalty income. This is mainly the result of back royalty payments in Molecular Diagnostics and the receipt of a royalty payment in Diabetes Care.

Diagnostics Division – Royalties and other operating income for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Royalty income	71	33	+121
Income from out-licensing agreements	2	12	–82
Income from disposal of products and other	5	5	–10
Total – IFRS and Core basis	**78**	**50**	**+56**

Cost of sales. Cost of sales increased by 9% at constant exchange rates on a core basis primarily due to an increase in manufacturing cost of goods sold and period costs of 10%. While previous cost reduction initiatives continued to have a positive impact, this was more than offset by the increase in placements of instruments and related installation costs. Instrument placements were up in the Clinical Chemistry and Immunology businesses by 41% driven by strong customer demand and partly due to the installation of instruments sourced from Hitachi High Technologies that had been subject to supply disruptions following the East Japan Earthquake in March 2011. The decrease in royalty expenses was due to patent expirations for certain in-licensed intellectual property. Overall, the cost growth on a core basis was slightly above sales growth resulting in a higher cost of sales ratio of 43.5% (2011: 42.3%). Global restructuring costs were incurred mainly due to closing costs for the Graz and Burgdorf sites. Amortisation of product intangibles decreased as some intangible assets were fully amortised by the end of 2011.

Diagnostics Division – Cost of sales for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Manufacturing cost of goods sold and period costs	(2,090)	(1,950)	+10
Royalty expenses	(90)	(99)	–8
Collaboration and profit-sharing agreements	–	(1)	–
Impairment of property, plant and equipment	–	(2)	–
Cost of sales – Core basis	**(2,180)**	**(2,052)**	**+9**
Global restructuring plans	(39)	(13)	+201
Amortisation of intangibles assets	(173)	(187)	–7
Impairment of intangible assets	(16)	–	–
Total – IFRS basis	**(2,408)**	**(2,252)**	**+9**

Marketing and distribution. The increase of 9% at constant exchange rates on a core basis mainly reflects higher costs due to bad debt expenses of 47 million Swiss francs in Turkey and Brazil and increases in factoring costs related to the reduction of outstanding trade receivables in Southern Europe. There were also additional costs to strengthen the sales organisation in support of key product launches in the United States. On a core basis, marketing and distribution costs as a percentage of sales were 25.0% compared to 24.1% in 2011. Global restructuring costs were mainly due to the reorganisations in the Applied Science and Diabetes Care businesses to improve the efficiency of marketing and distribution activities.

Diagnostics Division – Marketing and distribution for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Marketing and distribution – Core basis	**(1,254)**	**(1,174)**	**+9**
Global restructuring plans	(56)	(1)	Over +500
Amortisation of intangible assets	(3)	(2)	+27
Total – IFRS basis	**(1,313)**	**(1,177)**	**+14**

Research and development. Core costs increased by 7% at constant exchange rates. This was driven by the development of new immunoassays and tests in Professional Diagnostics and new insulin pumps in Diabetes Care. As a percentage of sales, research and development costs increased to 9.1% from 8.9% in 2011. Global restructuring costs were mainly due to costs related to the reorganisation in the Applied Science business.

Diagnostics Division – Research and development for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Research and development – Core basis	**(456)**	**(431)**	**+7**
Global restructuring plans	(29)	(10)	+185
Amortisation of intangible assets	(1)	(1)	+3
Total – IFRS basis	**(486)**	**(442)**	**+11**

General and administration. Costs increased by 10% at constant exchange rates on a core basis. The cost increase in administration was due to informatics projects and the roll-out of Finance Shared Service Centres. As a percentage of sales, costs increased by 0.3 percentage points to 4.1%. Global restructuring costs were mainly due to employee-related costs at the Graz and Burgdorf sites. In addition, goodwill impairment charges of 185 million Swiss francs were incurred for the full write-off of the goodwill from the NimbleGen acquisition, resulting from the decision to exit the microarrays business as part of the reorganisation of the Applied Science business area.

Diagnostics Division – General and administration for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(174)	(163)	+8
Other general items	(30)	(23)	+25
General and administration – Core basis	**(204)**	**(186)**	**+10**
Global restructuring plans	(21)	(5)	+334
Impairment of goodwill	(185)	–	–
Alliances and business combinations	(5)	(1)	Over +500
Legal and environmental settlements	(6)	(2)	+218
Total – IFRS basis	**(421)**	**(194)**	**+116**

Financial position

Diagnostics Division – Net operating assets

	30 June 2012 (mCHF)	31 Dec. 2011 (mCHF)	% change (CHF)	% change (CER)	Movement: Transactions (mCHF)	Movement: CTA (mCHF)
Receivables	3,509	3,593	–2	–3	(102)	18
Inventories	1,996	1,883	+6	+7	111	2
Payables	(1,911)	(1,975)	–3	–4	79	(15)
Net working capital	**3,594**	**3,501**	**+3**	**+3**	**88**	**5**
Property, plant and equipment	4,511	4,484	+1	+1	23	4
Goodwill and intangible assets	7,864	8,118	–3	–4	(348)	94
Provisions	(525)	(481)	+9	+9	(44)	0
Other long-term assets, net	(100)	(99)	+1	+4	(3)	2
Long-term net operating assets	**11,750**	**12,022**	**–2**	**–3**	**(372)**	**100**
Net operating assets	**15,344**	**15,523**	**–1**	**–2**	**(284)**	**105**

The absolute amount of the movement between the 30 June 2012 and 31 December 2011 consolidated balances reported in Swiss francs is split between actual 2012 transactions (translated at average rates for 2011) and the currency translation adjustment (CTA) that arises on consolidation. The 2012 transactions include non-cash movements and therefore the movements in this table are not the same as the amounts shown in the operating free cash flow (which only includes the cash movements). A full consolidated balance sheet is given on page 49 of the Interim Financial Statements, and a reconciliation between that balance sheet and the information given above is on page 77.

Currency translation effects on balance sheet amounts. During the first half of 2012 the Swiss franc slightly weakened against many currencies, most importantly against the US dollar. Following the intervention of the Swiss National Bank starting from the second half of 2011, the Swiss franc has been stable against the euro during 2012.

Net working capital. The 3% increase at constant exchange rates was driven by increases in inventories and decreases in payables. Inventory increases were due to the launch and growth of key products in Professional Diagnostics and Tissue Diagnostics and the establishment of a Middle-East Hub. The main factors for the decreases in receivables are collections and factoring initiatives in Southern European countries and bad debt write-offs. Payables decreased by 4% compared to the end of 2011 due to the settlement of accruals, including employee benefits, and lower purchase volumes of Hitachi instruments.

Long-term net operating assets. The decrease of 3% at constant exchange rates was due to a decrease in intangible assets due to the NimbleGen goodwill impairment and increases in provisions, mainly due to global restructuring plans. Property, plant and equipment remained stable as capital expenditure was fully offset by depreciation.

Free cash flow

Diagnostics Division – Operating free cash flow for the six months ended 30 June

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Operating profit – IFRS basis	**464**	**841**	**–44**
– Depreciation, amortisation and impairment	790	572	+40
– Provisions	64	(2)	–
– Equity compensation plans	4	14	–77
– Other	126	27	+400
Operating profit cash adjustments [1]	**984**	**611**	**+64**
Operating profit, net of operating cash adjustments	**1,448**	**1,452**	**+2**
(Increase) decrease in net working capital			
– Accounts receivable	52	(287)	–
– Inventories	(153)	(85)	+107
– Accounts payable	(59)	(13)	+319
Total (increase) decrease in net working capital	**(160)**	**(385)**	**–56**
Investments in property, plant and equipment	(480)	(444)	+11
Investments in intangible assets	(15)	(6)	+157
Operating free cash flow	**793**	**617**	**+30**
– as % of sales	15.8	12.7	+3.0

1) A detailed breakdown is provided on page 76.

The operating free cash flow of the Diagnostics Division increased by 30% at constant exchange rates and 29% in Swiss francs. This was primarily due to a lower increase in net working capital in the first half of 2012 compared to the first half of 2011. The improved collection of trade receivables and cash received from factoring initiatives resulted in a decrease in receivables. The higher inventory levels resulted from the launch and growth of key products in Professional Diagnostics and Tissue Diagnostics and the establishment of a Middle-East Hub. Payables were lower due to the settlement of accruals, including employee benefits, and lower purchase volumes of Hitachi instruments. Capital expenditure for property, plant and equipment increased by 11% driven by investments in China and Brazil. In total the operating free cash flow margin increased by 3.0 percentage points.

Corporate operating results

Corporate interim operating results summary

	2012 (mCHF)	2011 (mCHF)	% change (CER)
Administration	(210)	(185)	+13
Gains (losses) on divestment of subsidiaries	–	4	–
Restructuring expenses	–	–	–
Other general items	(36)	(16)	+119
General and administration costs – Core basis [1]	**(246)**	**(197)**	**+24**
Global restructuring plans	(9)	(4)	+121
Alliances and business combinations	–	–	–
Legal and environmental settlements	(315)	–	–
Total costs – IFRS basis	**(570)**	**(201)**	**+178**
Financial position			
Net working capital	1	(42)	–
Long-term net operating assets	(330)	2	–
Net operating assets	**(329)**	**(40)**	**Over +500**
Free cash flow			
Operating free cash flow	(262)	(237)	+10

1) See pages 72–75 for definition of Core results and Core EPS.

General and administration costs increased by 24% at constant exchange rates as a result of the shift of certain functions from the Pharmaceuticals and Diagnostics Divisions to Corporate and increased informatics costs from various initiatives. Total costs on an IFRS basis grew due to increased environmental provisions of 242 million Swiss francs as an initial estimate of the costs of the additional remediation activities that may be needed at the Nutley site in the US prior to it being sold. Further environmental costs were for the estimated additional remediation costs of a landfill site near Grenzach, Germany, that was previously used by manufacturing operations that were closed some years ago. Further details of these matters are given in Notes 7 and 10 to the Interim Financial Statements.

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

Foreign exchange impact on operating results

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

Growth (reported at CER and Swiss francs) for the six months ended 30 June

	% change (CER)		% change (CHF)	
	2012	2011	2012	2011
Pharmaceuticals Division				
Sales	+4	–1	+4	–13
Core operating profit	+9	+5	+7	–10
Diagnostics Division				
Sales	+5	+5	+3	–8
Core operating profit	–5	+5	–6	–9
Group				
Sales	+4	0	+3	–12
Core operating profit	+7	+5	+5	–10

Exchange rates against the Swiss franc

	30 June 2012	Average to 30 June 2012	31 December 2011	Average to 30 June 2011
1 USD	0.97	0.93	0.94	0.91
1 EUR	1.20	1.20	1.22	1.27
100 JPY	1.22	1.17	1.21	1.11

In the first half of 2012, the Swiss franc was stronger compared to the first half of 2011 for many currencies including the euro, but weakened against some others, notably the US dollar and Japanese yen. The overall impact is slightly negative on the results expressed in Swiss francs compared to constant exchange rates. For sales, these developments resulted in a negative impact of 1 percentage point, equivalent to 0.1 billion Swiss francs when translated into Swiss francs. The currency translation exposure for the operating profit is mitigated by the Group having the majority of its cost base located outside of Switzerland. Core operating profit increased in Swiss francs by 5% compared to an increase of 7% at constant exchange rates. This negative impact of 2 percentage points is equivalent to 0.1 billion Swiss francs. The sensitivity of Group sales and core operating profit to a 1% movement in foreign currencies against the Swiss franc during the first half of 2012 is shown in the table below.

Currency sensitivities for the six months ended 30 June 2012

Impact of 1% change in average exchange rate versus the Swiss franc	Sales (mCHF)	Core operating profit (mCHF)
US dollar	82	31
Euro	50	26
Japanese yen	22	14
All other currencies	59	36

Treasury and taxation results

Treasury and taxation interim results

	2012 (mCHF)	2011 (mCHF)	% change (CHF)	% change (CER)
IFRS results				
Operating profit	6,332	7,460	–15	–13
Associates	(2)	–	–	–
Financial income	239	373	–36	–36
Financing costs	(1,058)	(1,165)	–9	–10
Profit before taxes	**5,511**	**6,668**	**–17**	**–15**
Income taxes	(1,143)	(1,409)	–19	–18
Net income	**4,368**	**5,259**	**–17**	**–14**
Attributable to				
– Roche shareholders	4,255	5,151	–17	–14
– Non-controlling interests	113	108	+5	–1
Core results [1]				
Operating profit	8,641	8,251	+5	+7
Associates	(2)	–	–	–
Financial income	239	373	–36	–36
Financing costs	(1,058)	(1,165)	–9	–10
Profit before taxes	**7,820**	**7,459**	**+5**	**+7**
Income taxes	(1,785)	(1,638)	+9	+10
Net income	**6,035**	**5,821**	**+4**	**+6**
Attributable to				
– Roche shareholders	5,922	5,697	+4	+7
– Non-controlling interests	113	124	–9	–13
Financial position – Treasury and taxation				
Net debt	(17,333)	(15,566)	+11	+10
Pensions	(6,104)	(4,952)	+23	+24
Income taxes	912	174	+424	Over +500
Financial long-term assets	374	360	+4	+2
Derivatives, net	(293)	170	–	–
Collateral, net	60	(233)	–	–
Interest payable	(462)	(887)	–48	–49
Other non-operating assets, net	(65)	(75)	–13	–20
Total net assets (liabilities)	**(22,911)**	**(21,009)**	**+9**	**+8**
Free cash flow – Treasury and taxation				
Treasury activities	(1,147)	(1,048)	+9	+7
Taxes paid	(1,481)	(1,086)	+36	+36
Dividends paid	(5,851)	(5,689)	+3	+3
Total	**(8,479)**	**(7,823)**	**+8**	**+8**

1) See pages 72–75 for definition of Core results and Core EPS.

Financial income

Financial income was 239 million Swiss francs, a decrease of 36%. Interest income and income from debt securities were 18 million Swiss francs, a decrease of 53% due to the low prevailing interest rates during 2012. The net foreign exchange result reflects hedging costs and was a loss of 40 million Swiss francs compared to a gain of 26 million Swiss francs in the first half of 2011. The foreign exchange result in 2011 included gains of 42 million Swiss francs in Venezuela following the enactment of a law allowing the Group to benefit from pre-devaluation treatment for certain transactions. Net income from equity securities was 20 million Swiss francs, down by 63%. Expected returns on pension plan assets were 252 million Swiss francs, broadly in line with 2011. A full analysis of financial income is given in Note 4 to the Interim Financial Statements.

Financing costs

Financing costs were 1,058 million Swiss francs, a decrease of 107 million Swiss francs or 10% compared to the first half of 2011. The main driver was a 10% decrease in interest expenses which reflects the continued repayment of the debt incurred to finance the Genentech transaction. Financing costs also include 47 million Swiss francs for the loss on the repurchase of 782 million euros of notes that were due 4 March 2013. The comparative period in 2011 contained 89 million Swiss francs for the loss on early redemption of debt. The interest cost of pension plans remained stable at 288 million Swiss francs. A full analysis of financing costs is given in Note 4 to the Interim Financial Statements.

Income taxes

The Group's effective core tax rate increased by 0.8 percentage points to 22.8% in the first half of 2012 (2011: 22.0%). The main reasons for the increase of the effective tax rate were the higher percentage core profit contribution from the US, which has a relatively higher local tax rate than the average Group rate, and the non-renewal of the US research and development tax credit rules so far in 2012.

A tax benefit of 642 million Swiss francs was recorded for the non-core items described above compared to a tax benefit of 229 million Swiss francs in the first half of 2011. The increase was primarily due to the higher tax benefit resulting from the global restructuring plans including intangible asset impairments as well as legal and environmental costs as compared to 2011, partially offset by the tax effects of the costs resulting from the 2011 East Japan Earthquake.

Analysis of the Group's effective tax rate for the six months ended 30 June

	2012			2011		
	Profit before tax (mCHF)	Income taxes (mCHF)	Tax rate (%)	Profit before tax (mCHF)	Income taxes (mCHF)	Tax rate (%)
Group's effective tax rate – Core basis	**7,820**	**(1,785)**	**22.8**	**7,459**	**(1,638)**	**22.0**
Global restructuring plans	(1,083)	309	28.5	(391)	116	29.7
Goodwill and intangible assets	(928)	248	26.7	(331)	113	34.1
Other	(298)	85	28.5	(69)	–	–
Group's effective tax rate – IFRS basis	**5,511**	**(1,143)**	**20.7**	**6,668**	**(1,409)**	**21.1**

Financial position

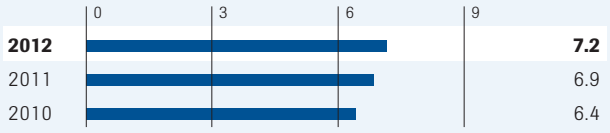
The increase in the net debt position was mainly due to the annual dividend payments of 5.9 billion Swiss francs and tax payments which more than offset the operating free cash flow, as is more fully described in the net debt section below. The increase in net pension liabilities reflects falling interest rates leading to the discounted defined benefit obligation being higher. The net tax assets increased mainly due to the deferred tax effect of the increased net pension liabilities. Additionally total taxes paid exceeded income tax expenses for the first half of 2012. The net derivative position decreased to a net liability of 0.3 billion Swiss francs, mainly due to lower valuations on the cross-currency swaps following a stronger US dollar compared to the euro. Interest payable relates mostly to bonds and notes with coupon payment dates in March and September, and the decline is due to 1.0 billion Swiss francs of coupon payments on bonds and notes during the interim period. At 30 June 2012 the Group held financial long-term assets with a market value of 0.4 billion Swiss francs, which consist mostly of holdings in biotechnology companies which were acquired in the context of licensing transactions or scientific collaborations.

Free cash flow

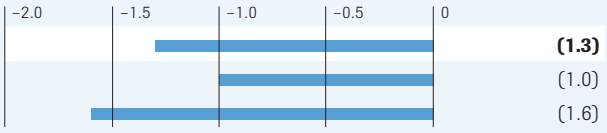
The cash outflow from treasury activities increased slightly to 1.1 billion Swiss francs mostly due to non-recurrence of foreign exchange gains and lower gains from sales of marketable securities partially offset by lower interest payments. Total taxes paid in the first half of 2012 were 1.5 billion Swiss francs, an increase of 36% at constant exchange rates. This was due to prepayments of tax and higher tax payments in the United States and at Chugai. Total dividends paid in the first half of 2012 were 5.9 billion Swiss francs, an increase of 0.2 billion Swiss francs compared to the first half of 2011, reflecting the 3% increase of the Roche Group dividend.

Cash flows and net debt

Operating free cash flow in billions of CHF



Free cash flow in billions of CHF



Free cash flow for the six months ended 30 June

	Pharmaceuticals (mCHF)	Diagnostics (mCHF)	Corporate (mCHF)	Group (mCHF)
2012				
Operating profit – IFRS basis	6,438	464	(570)	6,332
Operating profit cash adjustments	2,058	984	324	3,366
Operating profit, net of operating cash adjustments	**8,496**	**1,448**	**(246)**	**9,698**
(Increase) decrease in net working capital	(1,228)	(160)	(15)	(1,403)
Investments in property, plant and equipment	(482)	(480)	(1)	(963)
Investments in intangible assets	(147)	(15)	–	(162)
Operating free cash flow	**6,639**	**793**	**(262)**	**7,170**
Treasury activities				(1,147)
Taxes paid				(1,481)
Dividends paid				(5,851)
Free cash flow				**(1,309)**
2011				
Operating profit – IFRS basis	6,820	841	(201)	7,460
Operating profit cash adjustments	1,117	611	2	1,730
Operating profit, net of operating cash adjustments	**7,937**	**1,452**	**(199)**	**9,190**
(Increase) decrease in net working capital	(894)	(385)	(38)	(1,317)
Investments in property, plant and equipment	(481)	(444)	–	(925)
Investments in intangible assets	(86)	(6)	–	(92)
Operating free cash flow	**6,476**	**617**	**(237)**	**6,856**
Treasury activities				(1,048)
Taxes paid				(1,086)
Dividends paid				(5,689)
Free cash flow				**(967)**

Operating free cash flow increased by 7% at constant exchange rates to 7.2 billion Swiss francs, mainly due to the continued strong growth of the underlying operating business, which showed a 7% increase in core operating profit. In Pharmaceuticals the strong operating results were partially offset by increases in net working capital and higher investments in intangible assets. Diagnostics operating free cash flow increased significantly due to improved collection of trade receivables and factoring initiatives in Southern European countries.

The cash outflow from treasury activities slightly increased to 1.1 billion Swiss francs mostly due to the non-recurrence of foreign exchange gains. Total taxes paid were 1.5 billion Swiss francs, an increase due to prepayments of tax and higher tax payments in the United States and at Chugai. Total dividends paid were also higher due to the 3% increase of the annual Roche Group dividend.

Free cash flow showed an outflow of 1.3 billion Swiss francs, a higher outflow by 0.3 billion Swiss francs compared to the first half of 2011. The increase of the outflow was primarily due to the higher dividend and tax payments which more than offset the growth in the operating free cash flow.

Net debt in millions of CHF

31 December 2011	
Cash and cash equivalents	3,854
Marketable securities	7,433
Long-term debt	(23,459)
Short-term debt	(3,394)
Net debt at beginning of period	**(15,566)**
Free cash flow for six months ended 30 June 2012	(1,309)
Transactions in own equity instruments	(36)
Business combinations, net of divestments of subsidiaries	(36)
Hedging and collateral arrangements	(237)
Currency translation, fair value and other movements	(149)
Net change in net debt	**(1,767)**
30 June 2012	
Cash and cash equivalents	4,106
Marketable securities	5,114
Long-term debt	(21,153)
Short-term debt	(5,400)
Net debt at end of period	**(17,333)**

Net debt – Currency profile in millions of CHF

	Cash and marketable securities		Debt	
	30 June 2012	31 Dec. 2011	30 June 2012	31 Dec. 2011
US dollar [1]	1,229	1,102	(21,865)	(24,896)
Euro	2,646	2,133	(1,204)	(8)
Swiss franc	2,355	5,351	(2,980)	(1,484)
Japanese yen	2,478	2,080	(1)	–
Pound sterling	217	262	(296)	(287)
Other	295	359	(207)	(178)
Total	**9,220**	**11,287**	**(26,553)**	**(26,853)**

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

The net debt position of the Group at 30 June 2012 was 17.3 billion Swiss francs, an increase of 1.8 billion Swiss francs from 31 December 2011. The increase in net debt was mainly due to the negative free cash flow of 1.3 billion Swiss francs described above.

As the fair value of derivative hedging instruments moved down due to the strengthening of the US dollar against the euro during the first six months of 2012, cash collateral of 0.3 billion Swiss francs was delivered by Roche. The collateral balance in relation to the hedges on the non-US dollar-denominated bonds and notes is mainly sensitive to the foreign exchange rate between the US dollar and the euro, but also to pound sterling. Currently the collateral balance moves by approximately 100 million US dollars if all of these foreign exchange rates move by 1% simultaneously. Collateral volatility will decrease to less than 60 million US dollars for each 1% movement in foreign exchange rates by mid-2013 as a significant portion of the non-US dollar-denominated bonds and notes will have been repaid by this time.

The redemption and repurchase of bonds and notes and also the issuance of new bonds and notes during the first half of 2012 (see Note 11) had an impact on liquid funds. However, this had no impact on the net debt position.

Debt

To finance the Genentech transaction, the Group issued bonds and notes equivalent to 48.2 billion Swiss francs in February and March 2009. Of the debt raised in early 2009, 48% had already been repaid by 30 June 2012. This includes the redemption of 2.2 billion Swiss franc-denominated notes on due date and 0.8 billion euros of notes originally due 4 March 2013 that were repurchased on 23 March 2012 following a tender offer.

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

The maturity schedule of the Group's bonds and notes outstanding at 30 June 2012 is shown in the table below, which includes those instruments that were already in issue prior to the Genentech transaction.

Bonds and notes: nominal amounts at 30 June 2012 by contractual maturity

	US dollar (mUSD)	Euro (mEUR)	Pound sterling (mGBP)	Swiss franc (mCHF)	Total [1] (mUSD)	Total [1] (mCHF)
2012	–	–	–	–	–	–
2013	–	3,506[2]	–	400	4,776	4,611
2014	1,750	–	–	–	1,750	1,690
2015	1,000	–	900[2]	–	2,396	2,313
2016	–	2,750[2]	–	–	3,421	3,303
2017	–	–	–	1,500	1,554	1,500
2018–2022	4,500	2,750[3]	–	1,100	9,060	8,747
2023 and beyond	3,000	–	200	–	3,310	3,196
Total	**10,250**	**9,006**	**1,100**	**3,000**	**26,267**	**25,360**

1) Total translated at 30 June 2012 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.
3) Of the proceeds from these bonds and notes, 1.75 billion euros of 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 business operations. In the full year 2011 the free cash flow was 3.9 billion Swiss francs, which included the cash generated from operations, as well as payment of interest, tax and dividends. In the first half of 2012 free cash flow was an outflow of 1.3 billion Swiss francs, which includes 5.9 billion Swiss francs used for the payment of dividends.

For short-term financing requirements, the Group has a commercial paper programme in the United States under which it can issue up to 7.5 billion US dollars of unsecured commercial paper notes and committed credit lines of 3.9 billion euros available as back-stop lines. Commercial paper notes totalling 1.0 billion US dollars were outstanding as of 30 June 2012. 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 which should facilitate efficient access to international capital markets.

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

Financial risks

As at 30 June 2012 the Group has a net debt position of 17.3 billion Swiss francs (31 December 2011: 15.6 billion Swiss francs). The financial assets of the Group are managed in a conservative way with the objective to meet the Group's financial obligations at all times.

Asset allocation. A considerable portion of the cash and marketable securities the Group currently holds is being used for debt redemptions. Liquid funds are either held as cash or are invested in high-quality, investment-grade fixed income securities with an investment horizon to meet those liquidity requirements. During the first six months of 2012, Roche reduced its money market portfolio by 2.6 billion Swiss francs as the instruments matured or were sold.

Cash and marketable securities

	30 June 2012		31 December 2011	
	(mCHF)	(% of total)	(mCHF)	(% of total)
Cash and cash equivalents	4,106	44	3,854	34
Money market instruments	3,186	35	5,764	51
Bonds, debentures and other investments	1,621	18	1,428	13
Shares	307	3	241	2
Total cash and marketable securities	**9,220**	**100**	**11,287**	**100**

Credit risk. Credit risk arises from the possibility that counterparties to transactions may default on their obligations causing financial losses for the Group. The rating profile of the Group's 8.9 billion Swiss francs fixed income marketable securities remained strong with 96% 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 10.1 billion Swiss francs. Since the beginning of 2010 there have been increasing financial difficulties in Southern European countries, notably Spain, Italy, Greece and Portugal. The Group is a leading supplier to the healthcare sectors in these countries and has trade receivables of 1.3 billion euros (1.5 billion Swiss francs) with the public customers in these countries. This is a reduction of 0.5 billion euros from 31 December 2011, which is mainly due to collections in Spain following the Montoro plan as well as increased factoring deals in Italy. The Group uses different measures to improve collections in these countries, including intense communication with customers, factoring, negotiations of payments plans, charging of interest for late payments, and legal action. The Group is also applying cash on delivery with some public hospitals in Greece and Portugal.

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

Even after the Genentech transaction, 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 of which 4.7 billion Swiss francs serve as back-stop line for the commercial paper programme. As at 30 June 2012 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

	30 June 2012 (mCHF)	31 December 2011 (mCHF)
VaR – Interest rate component	245	301
VaR – Foreign exchange component	35	49
VaR – Other price component	35	35
Diversification	(34)	(69)
VaR – Total	**281**	**316**

Total VaR decreased by 11% to 281 million Swiss francs. The interest rate VaR decreased reflecting the ageing of debt. 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 decreased due to a broader mix of currency exposures leading to higher diversification effects. The VaR for other price risk components, which arises mainly from movements in the prices of equity securities, remained stable. At 30 June 2012 the Group held equity securities with a market value of 0.5 billion Swiss francs (31 December 2011: 0.4 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 2011 Annual Financial Statements.

International Financial Reporting Standards

The Roche Group has been using International Financial Reporting Standards (IFRS) to report its consolidated results since 1990. In 2012 the Group has implemented various minor amendments to existing standards and interpretations, which have no material impact on the Group's overall results and financial position.

Several new and revised standards have been issued, which should be implemented by 2013. These are listed in Note 1 to the Interim Financial Statements. The Group is currently assessing the potential impacts of the various new and revised standards which the Group has not yet applied.

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 Annual 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 Interim Consolidated Financial Statements

Reference numbers indicate the corresponding Notes to the Interim Consolidated Financial Statements. The Interim Consolidated Financial Statements are unaudited. The Interim Consolidated Financial Statements have been reviewed by the Group's auditors and their review report is presented on page 71.

Roche Group consolidated income statement for the six months ended 30 June 2012 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2]	**17,409**	**5,014**	**–**	**22,423**
Royalties and other operating income [2]	802	78	–	880
Cost of sales	(3,640)	(2,408)	–	(6,048)
Marketing and distribution	(2,791)	(1,313)	–	(4,104)
Research and development [2]	(4,472)	(486)	–	(4,958)
General and administration	(870)	(421)	(570)	(1,861)
Operating profit [2]	**6,438**	**464**	**(570)**	**6,332**
Associates				(2)
Financial income [4]				239
Financing costs [4]				(1,058)
Profit before taxes				**5,511**
Income taxes [5]				(1,143)
Net income				**4,368**
Attributable to				
– Roche shareholders				4,255
– Non-controlling interests				113
Earnings per share and non-voting equity security				
Basic (CHF)				5.02
Diluted (CHF)				4.99

Roche Group consolidated income statement for the six months ended 30 June 2011 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Group
Sales [2]	**16,815**	**4,856**	**–**	**21,671**
Royalties and other operating income [2]	746	50	–	796
Cost of sales	(3,846)	(2,252)	–	(6,098)
Marketing and distribution	(2,681)	(1,177)	–	(3,858)
Research and development [2]	(3,543)	(442)	–	(3,985)
General and administration	(671)	(194)	(201)	(1,066)
Operating profit [2]	**6,820**	**841**	**(201)**	**7,460**
Associates				–
Financial income [4]				373
Financing costs [4]				(1,165)
Profit before taxes				**6,668**
Income taxes [5]				(1,409)
Net income				**5,259**
Attributable to				
– Roche shareholders				5,151
– Non-controlling interests				108
Earnings per share and non-voting equity security				
Basic (CHF)				6.06
Diluted (CHF)				6.04

Roche Group consolidated statement of comprehensive income in millions of CHF

	Six months ended 30 June	
	2012	2011
Net income recognised in income statement	**4,368**	**5,259**
Other comprehensive income		
Available-for-sale investments	19	33
Cash flow hedges	(24)	(113)
Currency translation of foreign operations	(153)	132
Defined benefit post-employment plans	(900)	(162)
Other comprehensive income, net of tax	**(1,058)**	**(110)**
Total comprehensive income	**3,310**	**5,149**
Attributable to		
– Roche shareholders	3,183	5,258
– Non-controlling interests	127	(109)
Total	**3,310**	**5,149**

Roche Group consolidated balance sheet in millions of CHF

	30 June 2012	31 December 2011
Non-current assets		
Property, plant and equipment	15,761	16,201
Goodwill [8]	7,777	7,843
Intangible assets [9]	4,621	5,126
Associates	22	24
Financial long-term assets	374	360
Other long-term assets	474	460
Deferred income tax assets	3,200	2,762
Post-employment benefit assets	580	568
Total non-current assets	**32,809**	**33,344**
Current assets		
Inventories	5,513	5,060
Accounts receivable	9,559	9,799
Current income tax assets	245	222
Other current assets	2,261	1,864
Marketable securities	5,114	7,433
Cash and cash equivalents	4,106	3,854
Total current assets	**26,798**	**28,232**
Total assets	**59,607**	**61,576**
Non-current liabilities		
Long-term debt [11]	(21,153)	(23,459)
Deferred income tax liabilities	(235)	(604)
Post-employment benefit liabilities	(6,684)	(5,520)
Provisions [10]	(1,160)	(991)
Other non-current liabilities	(296)	(310)
Total non-current liabilities	**(29,528)**	**(30,884)**
Current liabilities		
Short-term debt [11]	(5,400)	(3,394)
Current income tax liabilities	(2,298)	(2,206)
Provisions [10]	(2,257)	(1,742)
Accounts payable	(1,623)	(2,053)
Accrued and other current liabilities	(6,425)	(6,815)
Total current liabilities	**(18,003)**	**(16,210)**
Total liabilities	**(47,531)**	**(47,094)**
Total net assets	**12,076**	**14,482**
Equity		
Capital and reserves attributable to Roche shareholders	9,616	12,095
Equity attributable to non-controlling interests	2,460	2,387
Total equity	**12,076**	**14,482**

Roche Group consolidated statement of cash flows in millions of CHF

	Six months ended 30 June	
	2012	2011
Cash flows from operating activities		
Cash generated from operations [13]	10,203	9,598
(Increase) decrease in net working capital	(1,403)	(1,317)
Payments made for defined benefit post-employment plans	(208)	(165)
Utilisation of provisions	(370)	(563)
Disposal of products	78	51
Other operating cash flows	2	4
Cash flows from operating activities, before income taxes paid	**8,302**	**7,608**
Income taxes paid	(1,481)	(1,086)
Total cash flows from operating activities	**6,821**	**6,522**
Cash flows from investing activities		
Purchase of property, plant and equipment	(963)	(925)
Purchase of intangible assets	(162)	(92)
Disposal of property, plant and equipment	35	284
Disposal of intangible assets	–	–
Business combinations [6]	(36)	(71)
Divestments of subsidiaries [14]	–	4
Interest and dividends received	18	17
Sales of marketable securities	23,084	18,934
Purchases of marketable securities	(20,678)	(15,992)
Other investing cash flows	(18)	50
Total cash flows from investing activities	**1,280**	**2,209**
Cash flows from financing activities		
Proceeds from issue of bonds and notes [11]	2,698	–
Redemption and repurchase of bonds and notes [11]	(3,179)	(3,058)
Increase (decrease) in commercial paper [11]	(80)	846
Increase (decrease) in other debt	16	16
Hedging and collateral arrangements [11]	(237)	1,288
Interest paid	(1,131)	(1,253)
Dividends paid	(5,851)	(5,689)
Equity-settled equity compensation plans, net of transactions in own equity instruments	(110)	(460)
Other financing cash flows	–	–
Total cash flows from financing activities	**(7,874)**	**(8,310)**
Net effect of currency translation on cash and cash equivalents	25	(212)
Increase (decrease) in cash and cash equivalents	**252**	**209**
Cash and cash equivalents at beginning of period	3,854	1,841
Cash and cash equivalents at end of period	**4,106**	**2,050**

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

	Share capital	Retained earnings	Fair value reserves	Hedging reserves	Translation reserves	Total	Non-controlling interests	Total equity
Six months ended 30 June 2011								
At 1 January 2011	**160**	**14,550**	**174**	**(103)**	**(5,312)**	**9,469**	**2,193**	**11,662**
Net income recognised in income statement	–	5,151	–	–	–	5,151	108	5,259
Available-for-sale investments	–	–	35	–	–	35	(2)	33
Cash flow hedges	–	–	–	(113)	–	(113)	–	(113)
Currency translation of foreign operations	–	–	(20)	30	337	347	(215)	132
Defined benefit post-employment plans	–	(162)	–	–	–	(162)	–	(162)
Total comprehensive income	**–**	**4,989**	**15**	**(83)**	**337**	**5,258**	**(109)**	**5,149**
Dividends	–	(5,614)	–	–	–	(5,614)	(68)	(5,682)
Equity compensation plans, net of transactions in own equity instruments	–	(283)	–	–	–	(283)	–	(283)
Changes in non-controlling interests	–	–	–	–	–	–	–	–
At 30 June 2011	**160**	**13,642**	**189**	**(186)**	**(4,975)**	**8,830**	**2,016**	**10,846**
Six months ended 30 June 2012								
At 1 January 2012	**160**	**17,265**	**124**	**(20)**	**(5,434)**	**12,095**	**2,387**	**14,482**
Net income recognised in income statement	–	4,255	–	–	–	4,255	113	4,368
Available-for-sale investments	–	–	16	–	–	16	3	19
Cash flow hedges	–	–	–	(25)	–	(25)	1	(24)
Currency translation of foreign operations	–	–	2	1	(166)	(163)	10	(153)
Defined benefit post-employment plans	–	(900)	–	–	–	(900)	–	(900)
Total comprehensive income	**–**	**3,355**	**18**	**(24)**	**(166)**	**3,183**	**127**	**3,310**
Dividends	–	(5,770)	–	–	–	(5,770)	(54)	(5,824)
Equity compensation plans, net of transactions in own equity instruments	–	108	–	–	–	108	–	108
Changes in non-controlling interests	–	–	–	–	–	–	–	–
At 30 June 2012	**160**	**14,958**	**142**	**(44)**	**(5,600)**	**9,616**	**2,460**	**12,076**

Notes to the Roche Group Interim Consolidated Financial Statements

Reference numbers indicate the corresponding Notes to the Interim Consolidated Financial Statements.
The Interim Consolidated Financial Statements are unaudited. The Interim Consolidated Financial Statements have been reviewed by the Group's auditors and their review report is presented on page 71.

1. Accounting policies

Basis of preparation of financial statements

These financial statements are the unaudited interim consolidated financial statements (hereafter 'the Interim Financial Statements') of Roche Holding Ltd, a company registered in Switzerland, and its subsidiaries (hereafter 'the Group') for the six-month period ended 30 June 2012 (hereafter 'the interim period'). They are prepared in accordance with International Accounting Standard 34 (IAS 34) 'Interim Financial Reporting'. These Interim Financial Statements should be read in conjunction with the Consolidated Financial Statements for the year ended 31 December 2011 (hereafter 'the Annual Financial Statements'), as they provide an update of previously reported information. They were approved for issue by the Board of Directors on 24 July 2012.

The Interim Financial Statements have been prepared in accordance with the accounting policies and methods of computation set out in the Annual Financial Statements, except for the accounting policy changes described below made after the date of the Annual Financial Statements. The presentation of the Interim Financial Statements is consistent with the Annual Financial Statements, except where noted below. Where necessary, comparative information has been reclassified or expanded from the previously reported Interim Financial Statements to take into account any presentational changes made in the Annual Financial Statements or in these Interim Financial Statements.

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

The Group operates in industries where significant seasonal or cyclical variations in total sales are not experienced during the financial year. Income tax expense is recognised based upon the best estimate of the weighted average income tax rate expected for the full financial year.

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 Corporate Executive Committee 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.

Changes in accounting policies

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

New and revised standards. The following new standards were issued by the International Accounting Standards Board (IASB). These 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'

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 2013 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 Annual Financial Statements, net financial income for that year 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

Six months ended 30 June	Pharmaceuticals 2012	Pharmaceuticals 2011	Diagnostics 2012	Diagnostics 2011	Corporate 2012	Corporate 2011	Group 2012	Group 2011
Revenues from external customers								
Sales	17,409	16,815	5,014	4,856	–	–	22,423	21,671
Royalties and other operating income	802	746	78	50	–	–	880	796
Total	**18,211**	**17,561**	**5,092**	**4,906**	**–**	**–**	**23,303**	**22,467**
Revenues from other operating segments								
Sales	–	–	5	5	–	–	5	5
Royalties and other operating income	–	–	–	–	–	–	–	–
Elimination of inter-divisional revenue							(5)	(5)
Total	**–**	**–**	**5**	**5**	**–**	**–**	**–**	**–**
Segment results								
Operating profit	6,438	6,820	464	841	(570)	(201)	6,332	7,460
Capital expenditure								
Business combinations	–	–	17	123	–	–	17	123
Additions to property, plant and equipment	425	455	465	412	1	–	891	867
Additions to intangible assets	147	92	15	6	–	–	162	98
Total capital expenditure	**572**	**547**	**497**	**541**	**1**	**–**	**1,070**	**1,088**
Research and development								
Research and development costs	4,472	3,543	486	442	–	–	4,958	3,985
Other segment information								
Depreciation of property, plant and equipment	531	545	405	380	3	3	939	928
Amortisation of intangible assets	89	77	177	190	–	–	266	267
Impairment of property, plant and equipment	431	48	7	2	–	–	438	50
Impairment of goodwill	–	–	185	–	–	–	185	–
Impairment of intangible assets	461	64	16	–	–	–	477	64
Impairment of net assets-held-for-sale	–	117	–	–	–	–	–	117
Equity compensation plan expenses	144	151	18	18	7	6	169	175

Pharmaceuticals sub-divisional information in millions of CHF

Six months ended 30 June	Roche Pharmaceuticals 2012	Roche Pharmaceuticals 2011	Chugai 2012	Chugai 2011	Pharmaceuticals Division 2012	Pharmaceuticals Division 2011
Revenues from external customers						
Sales	15,466	14,984	1,943	1,831	17,409	16,815
Royalties and other operating income	771	704	31	42	802	746
Total	**16,237**	**15,688**	**1,974**	**1,873**	**18,211**	**17,561**
Revenues from other operating segments						
Sales	426	435	156	101	582	536
Royalties and other operating income	12	11	32	24	44	35
Elimination of income within division					(626)	(571)
Total	**438**	**446**	**188**	**125**	**–**	**–**
Segment results						
Operating profit	6,009	6,616	382	306	6,391	6,922
Elimination of inter-divisional profit					47	(102)
Operating profit	**6,009**	**6,616**	**382**	**306**	**6,438**	**6,820**
Capital expenditure						
Business combinations	–	–	–	–	–	–
Additions to property, plant and equipment	363	368	62	87	425	455
Additions to intangible assets	147	85	–	7	147	92
Total capital expenditure	**510**	**453**	**62**	**94**	**572**	**547**
Research and development						
Research and development costs	4,108	3,178	375	375	4,483	3,553
Elimination of costs within division					(11)	(10)
Total	**4,108**	**3,178**	**375**	**375**	**4,472**	**3,543**
Other segment information						
Depreciation of property, plant and equipment	458	474	73	71	531	545
Amortisation of intangible assets	52	43	37	34	89	77
Impairment of property, plant and equipment	431	33	–	15	431	48
Impairment of goodwill	–	–	–	–	–	–
Impairment of intangible assets	461	64	–	–	461	64
Impairment of net assets-held-for-sale	–	117	–	–	–	117
Equity compensation plan expenses	143	150	1	1	144	151

3. Chugai

The common stock of Chugai is publicly traded and is listed on the Tokyo Stock Exchange under the stock code 'TSE: 4519'. At 30 June 2012 the Group's interest in Chugai was 61.6% (31 December 2011: 61.6%). 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.

Dividends

The dividends distributed to third parties holding Chugai shares during the interim period totalled 49 million Swiss francs (2011: 53 million Swiss francs) and have been recorded to equity. 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

	Six months ended 30 June	
	2012	2011
Cost of sales	–	(60)
Marketing and distribution	–	(1)
General and administration	–	(3)
Total	**–**	**(64)**

4. Financial income and financing costs

Financial income in millions of CHF

	Six months ended 30 June	
	2012	2011
Gains on sale of equity securities	24	67
(Losses) on sale of equity securities	(2)	(4)
Dividend income	1	1
Gains (losses) on equity security derivatives, net	1	1
Write-downs and impairments of equity securities	(4)	(11)
Net income from equity securities	**20**	**54**
Interest income	19	43
Gains on sale of debt securities	–	21
(Losses) on sale of debt securities	(1)	(15)
Gains (losses) on debt security derivatives, net	–	–
Write-downs and impairments of long-term loans	–	(9)
Net interest income and income from debt securities	**18**	**40**
Expected return on plan assets of defined benefit plans	252	253
Foreign exchange gains (losses), net	(87)	(230)
Gains (losses) on foreign currency derivatives, net	47	256
Net foreign exchange gains (losses)	**(40)**	**26**
Net other financial income (expense)	(11)	–
Total financial income	**239**	**373**

Financing costs in millions of CHF

	Six months ended 30 June	
	2012	2011
Interest expense	(702)	(765)
Amortisation of debt discount [11]	(15)	(18)
Gains (losses) on debt derivatives, net	–	–
Gains (losses) on redemption and repurchase of bonds and notes, net [11]	(47)	(89)
Time cost of provisions	(6)	(5)
Interest cost of defined benefit plans	(288)	(288)
Total financing costs	**(1,058)**	**(1,165)**

Net financial income in millions of CHF

	Six months ended 30 June	
	2012	2011
Financial income	239	373
Financing costs	(1,058)	(1,165)
Net financial income	**(819)**	**(792)**
Financial result from Treasury management	(783)	(757)
Financial result from Pension management	(36)	(35)
Net financial income	**(819)**	**(792)**

5. Income taxes

Income tax expenses in millions of CHF

	Six months ended 30 June	
	2012	2011
Current income taxes	(1,528)	(1,518)
Adjustments recognised for current tax of prior periods	(3)	17
Deferred income taxes	388	92
Total income tax (expense)/benefit	**(1,143)**	**(1,409)**

The Group's effective tax rate decreased by 0.4 percentage points to 20.7% in the first six months of 2012 (2011: 21.1%). The main reason for the decrease of the effective tax rate was the relatively lower percentage profit contribution from higher tax jurisdictions (due to higher global restructuring costs in the US), which was partially offset by a non-deductible goodwill impairment and the non-renewal of the US research and development tax credit rules so far in 2012.

The income tax benefits recorded in respect of equity compensation plans, which vary according to the price of the underlying equity, were 32 million Swiss francs (2011: 29 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 51 million Swiss francs (2011: 58 million Swiss francs) would have been recorded.

6. Business combinations

Acquisitions – 2012

Verum. Effective 3 January 2012 the Group acquired a 100% controlling interest in the privately owned company Verum Diagnostica GmbH, ('Verum'), based in Munich, Germany. Verum is reported as part of the Diagnostics operating segment. The purchase consideration was 11 million euros of which 10 million euros were paid in cash and 1 million euros arose from a contingent consideration arrangement. The acquisition of Verum did not have a material impact on the Group's results or financial position.

Acquisitions – 2012: net cash outflow in millions of CHF

	Cash consideration paid	Cash in acquired company	Net cash outflow
Acquisitions	(13)	–	(13)
Contingent consideration paid on prior year acquisitions	(23)	–	(23)
Total	**(36)**	**–**	**(36)**

Acquisitions – 2011

PVT. Effective 29 April 2011 the Group acquired a 100% controlling interest in the privately owned companies PVT Probenverteiltechnik GmbH, based in Waiblingen, Germany, and PVT Lab Systems, LLC, based in Atlanta, Georgia, in the United States (jointly 'PVT'). The total purchase consideration was 117 million Swiss francs of which 85 million Swiss francs was in cash, of which 8 million Swiss francs was paid in the second half of 2011, and 32 million Swiss francs arose from a contingent consideration arrangement. This transaction is fully described in Note 6 to the Annual Financial Statements.

Acquisitions – 2011: net cash outflow in millions of CHF

	Cash consideration paid	Cash in acquired company	Net cash outflow
Acquisitions	(77)	6	(71)

Contingent consideration arrangements

The Group is party to certain contingent consideration arrangements arising from previous business combination arrangements. At 30 June 2012 these provisions totalled 78 million Swiss francs (31 December 2011: 153 million Swiss francs). The decrease was mainly due to the payment of 23 million Swiss francs and a release of 51 million Swiss francs of provisions, mainly relating to the Marcadia acquisition.

7. Global restructuring plans

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

Global restructuring plans: costs incurred in millions of CHF

	Pharma R&D [1]	Diagnostics [2]	Pharma Informatics	Other plans [3]	Total
Six months ended 30 June 2012					
Global restructuring costs					
– Employee-related costs	194	67	49	75	385
– Site closure costs	367	15	–	110	492
– Other reorganisation expenses	10	12	–	184	206
Total global restructuring costs	**571**	**94**	**49**	**369**	**1,083**
Additional costs					
– Impairment of goodwill	–	185	–	–	185
– Impairment of intangible assets	45	10	–	112	167
– Legal and environmental costs	242	–	–	–	242
Total costs	**858**	**289**	**49**	**481**	**1,677**

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

Pharmaceuticals Division – Research and Development reorganisation

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

During the interim period costs of 571 million Swiss francs were incurred, based on initial estimates of the cost of the reorganisation. Of this amount, 194 million Swiss francs were provisions for severance payments and other employee-related costs, net of estimated curtailment gains from pension and other post-employment benefit plans. An impairment charge of 367 million Swiss francs was recorded for property, plant and equipment at the Nutley site. This reduces the carrying value of the site to a preliminary estimate of the expected sales proceeds less costs of disposal. Other restructuring costs totalled 10 million Swiss francs.

In addition environmental remediation costs of 242 million Swiss francs were recorded based on the initial estimates of the costs of additional remediation activities that may be needed before the Nutley site can be sold. An additional 45 million Swiss francs were expensed for the write-off of previously acquired intangible assets as a result of portfolio prioritisation decisions (see Note 9).

Diagnostics Division – Applied Science and Diabetes Care restructuring

In the Diagnostics Division several global restructuring initiatives were announced in 2012. These are focussed on the Applied Science and Diabetes Care business areas and include streamlining the product portfolio and increasing the efficiency of marketing and distribution operations and research and development activities. In total, costs of 94 million Swiss francs were incurred in the first half of 2012, which relate to employee termination and site closure costs. An additional 185 million Swiss francs were expensed for the impairment of goodwill (see Note 8) and 10 million Swiss francs for the write-off of previously acquired intangible assets (see Note 9).

Pharmaceuticals Division – Global informatics reorganisation

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

Other global restructuring plans

On 17 November 2010 the Group announced details concerning the Operational Excellence global restructuring plan. Full details of the plan are described in Note 7 to the Annual Financial Statements. During the interim period costs of 239 million Swiss francs were incurred mainly for employee-related costs for sales force restructuring initiatives in the Pharmaceuticals Division, and employee-related and site closure costs in the Diagnostics Division in respect of the sites in Burgdorf, Switzerland and Graz, Austria. Costs incurred in the interim period of 2011 mainly relate to the closure of the US sites at Palo Alto, California, and Boulder, Colorado.

In the second quarter of 2012 the Pharmaceuticals Division initiated a detailed review following the announcement of the results of the second interim analysis of the dalcetrapib dal-OUTCOMES Phase III trial and the subsequent termination of the dal-OUTCOMES trial and all the studies in the dal-HEART programme. Restructuring costs of 130 million Swiss francs were incurred, which consist of provisions for remaining trial costs and write-offs of inventories and property, plant and equipment. An additional 112 million Swiss francs were expensed for the write-off of previously acquired intangible assets (see Note 9).

Global restructuring plans: costs incurred in millions of CHF

	Six months ended 30 June	
	2012	2011
Employee-related costs		
– Termination costs	452	41
– Pensions and other post-employment benefits	(83)	2
– Other employee-related costs	16	11
Total employee-related costs	**385**	**54**
Site closure costs		
– Impairment of property, plant and equipment	428	35
– Accelerated depreciation of property, plant and equipment	21	32
– (Gains) losses on disposal of property, plant and equipment	–	(43)
– Other site closure costs	43	31
Total site closure costs	**492**	**55**
Divestment of products and businesses		
– Impairment of net assets-held-for-sale	–	117
– (Gains) losses on divestment of businesses	–	–
Total costs on divestment of products and businesses	**–**	**117**
Other reorganisation expenses	206	165
Total global restructuring costs	**1,083**	**391**
Additional costs		
– Impairment of goodwill [8]	185	–
– Impairment of intangible assets [9]	167	–
– Legal and environmental costs [10]	242	–
Total costs	**1,677**	**391**

Global restructuring plans: classification of total costs in millions of CHF

	2012			2011		
	Depreciation, amortisation and impairment	Other costs	Total	Depreciation, amortisation and impairment	Other costs	Total
Cost of sales						
– Pharmaceuticals	35	31	66	23	55	78
– Diagnostics	16	33	49	2	11	13
Marketing and distribution						
– Pharmaceuticals	–	40	40	–	15	15
– Diagnostics	2	54	56	–	1	1
Research and development						
– Pharmaceuticals	267	313	580	33	28	61
– Diagnostics	2	27	29	–	10	10
General and administration						
– Pharmaceuticals	294	106	400	126	78	204
– Diagnostics	185	22	207	–	5	5
– Corporate	–	250	250	–	4	4
Total	**801**	**876**	**1,677**	**184**	**207**	**391**
Total by operating segment						
– Roche Pharmaceuticals	596	490	1,086	182	176	358
– Chugai	–	–	–	–	–	–
– Diagnostics	205	136	341	2	27	29
– Corporate	–	250	250	–	4	4
Total	**801**	**876**	**1,677**	**184**	**207**	**391**

8. Goodwill

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

Six months ended 30 June 2012	
At 1 January 2012	7,843
Business combinations [6]	–
Impairment charge	(185)
Currency translation effects	119
At 30 June 2012	**7,777**
Allocation by operating segment	
– Roche Pharmaceuticals	2,150
– Chugai	135
– Diagnostics	5,492
Total Group	**7,777**

In the Diagnostics Division several global restructuring initiatives were announced in 2012, as disclosed in Note 7. As part of the plan for streamlining the product portfolio in the Applied Science business, the division will exit the microarray business that was acquired in 2007 through the acquisition of NimbleGen.

This decision was considered a trigger to test goodwill for impairment and, moreover, consequent from this decision, the microarray business is no longer considered to be part of the Applied Science business area cash generating unit for assessing any impairment. Given the division's plans to fully exit the microarray business, the goodwill that arose from the NimbleGen acquisition was considered to be fully impaired and a charge of 185 million Swiss francs was recorded. The remaining goodwill in the Applied Science business area, which totals 36 million Swiss francs, is supported by the value in use of the on-going business.

9. 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	Technology intangibles	Total
Six months ended 30 June 2012					
At 1 January 2012	2,745	2,326	12	43	5,126
Business combinations [6]	17	–	–	–	17
Additions	80	57	–	25	162
Disposals	–	–	–	–	–
Transfers	121	(121)	–	–	–
Amortisation charge	(259)	–	(3)	(4)	(266)
Impairment charge	(29)	(448)	–	–	(477)
Currency translation effects	28	31	–	–	59
At 30 June 2012	**2,703**	**1,845**	**9**	**64**	**4,621**
Allocation by operating segment					
– Roche Pharmaceuticals	656	1,334	–	47	2,037
– Chugai	212	–	–	–	212
– Diagnostics	1,835	511	9	17	2,372
Total Group	**2,703**	**1,845**	**9**	**64**	**4,621**

Classification of amortisation and impairment expenses in millions of CHF

	Six months ended 30 June 2012		Six months ended 30 June 2011	
	Amortisation	Impairment	Amortisation	Impairment
Cost of sales				
– Pharmaceuticals	75	13	69	32
– Diagnostics	173	16	187	–
Marketing and distribution				
– Diagnostics	3	–	2	–
Research and development				
– Pharmaceuticals	14	448	8	32
– Diagnostics	1	–	1	–
General and administration				
– Pharmaceuticals	–	–	–	–
Total	**266**	**477**	**267**	**64**

Impairment charges arise from changes in the estimates of the future cash flows expected to result from the use of an 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.

Impairment of intangible assets – 2012

Total impairment charges in the interim period were 477 million Swiss francs, of which 461 million Swiss francs were in the Roche Pharmaceuticals operating segment and 16 million Swiss francs in the Diagnostics operating segment.

Pharmaceuticals Division. Impairment charges totalling 157 million Swiss francs arose from the various global restructuring initiatives disclosed in Note 7. Following the recent dalcetrapib trial results, impairment charges of 112 million Swiss francs were incurred in respect of previously acquired intangible assets. Additionally impairment charges of 45 million Swiss francs were recorded following a portfolio prioritisation decision as part of the reorganisation of research and development in the Pharmaceuticals Division. The assets concerned, which were not yet being amortised, were fully written down.

Impairment charges of 103 million Swiss francs were recorded following a portfolio prioritisation decision by the Pharmaceuticals Division. This relates to a decision to return the global rights to the monoclonal antibody RG 7334 anti-PLGF MAb to the alliance partners. The assets concerned, which were not yet being amortised, were fully written down by these charges.

Impairment charges of 160 million Swiss francs were recorded following the latest clinical data assessment of a project acquired as part of the Marcadia acquisition. The assets concerned, which were not yet being amortised, were written down to their recoverable value of 32 million Swiss francs.

Following recent clinical data, further impairment charges of 28 million Swiss francs were recorded in respect to a project in collaboration with an alliance partner. The assets concerned, which were not yet being amortised, were fully written down by these charges. In addition, impairment charges of 13 million Swiss francs were recorded, which relate to a decision to stop development of one compound with an alliance partner. The assets concerned, which were being amortised, were fully written down by these charges.

Diagnostics Division. Impairment charges of 16 million Swiss francs were recorded, which includes 10 million Swiss francs from global restructuring initiatives in the Applied Science and Diabetes Care businesses (see Note 7). The assets concerned, which had been partly amortised, were written down to their recoverable value of 5 million Swiss francs.

Impairment of intangible assets – 2011

Pharmaceuticals Division. Impairment charges of 64 million Swiss francs were recorded. Impairment charges of 32 million Swiss francs were recorded from a decision to stop development of a project acquired in a business combination that had been out-licensed to an alliance partner. The assets concerned, which had been partly amortised, were written down to their recoverable value of 29 million Swiss francs. Further charges of 32 million Swiss francs were 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.

10. Provisions and contingent liabilities

Provisions in millions of CHF

	30 June 2012	31 December 2011
Legal provisions	766	746
Environmental provisions	592	265
Restructuring provisions	869	566
Employee provisions	289	289
Other provisions	901	867
Total provisions	**3,417**	**2,733**
Of which		
– Current portion	2,257	1,742
– Non-current portion	1,160	991
Total provisions	**3,417**	**2,733**

Expenses for legal and environmental settlements during the interim period totalled 337 million Swiss francs (2011: 2 million Swiss francs). As disclosed above in Note 7, the restructuring plan to streamline the research and development activities within the Pharmaceuticals Division includes the closure of the US site in Nutley, New Jersey. Costs of 242 million Swiss francs were recorded based on the initial estimates of the costs of additional remediation activities that may be needed before the Nutley site can be sold. The remaining 95 million Swiss francs reflects recent developments in various legal and environmental matters and mainly consists of an increase in the estimated remediation costs for a landfill site near Grenzach, Germany, that was used by manufacturing operations that were closed some years ago.

Payments in the interim period from previously recorded provisions totalled 370 million Swiss francs (2011: 563 million Swiss francs).

Other than as described below, no significant changes in the Group's contingent liabilities have occurred since the approval of the Annual Financial Statements by the Board of Directors.

Litigation. As described in Note 24 to the Annual Financial Statements, 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. Genentech filed its own motion for summary judgment of non-infringement and invalidity, which was also heard on 19 April 2012. The Court denied both motions by order dated 14 May 2012. On 7 June 2012 the parties entered into a binding term sheet to settle the litigation and the parties dismissed the case by stipulation.

There have been certain procedural developments in the other significant litigation matters described in Note 24 to the Annual Financial Statements. These do not significantly affect the assessment of the Group's management concerning the adequacy of the total provisions recorded for legal proceedings.

11. Debt

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

Six months ended 30 June 2012	
At 1 January 2012	26,853
Proceeds from issue of bonds and notes	2,698
Redemption and repurchase of bonds and notes	(3,179)
Increase (decrease) in commercial paper	(80)
Increase (decrease) in other debt	16
(Gains) losses on redemption and repurchase of bonds and notes, net	47
Amortisation of debt discount [4]	15
Foreign currency transaction (gains) losses, net	(285)
Currency translation effects and other	468
At 30 June 2012	**26,553**
Consisting of	
– Bonds and notes	25,147
– Commercial paper	966
– Amounts due to banks and other financial institutions	191
– Finance lease obligations	224
– Other borrowings	25
Total debt	**26,553**
Reported as	
– Long-term debt	21,153
– Short-term debt	5,400
Total debt	**26,553**

Foreign currency transaction gains of 285 million Swiss francs are mainly related to the stronger US dollar compared to euro and occurred in Roche Holdings, Inc., the US holding company which is the issuer of most of the outstanding bonds and notes. These gains were recorded in the income statement, where they have been offset by losses on the hedging derivatives.

The increase in debt of 468 million Swiss francs from foreign currency translation is mainly due to a 3% increase in the US dollar compared to the Swiss franc since 31 December 2011. This foreign currency translation loss occurred upon translating the debt issued by the Group's US affiliates into Swiss francs upon consolidation and is recorded in equity within 'currency translation of foreign operations'.

Issuance of bonds and notes – 2012

The Group raised net proceeds of approximately 2.7 billion Swiss francs through a series of debt offerings in 2012. All newly issued debt is senior, unsecured and has been guaranteed by Roche Holding Ltd.

European Medium Term Notes. On 23 March 2012 the Group issued euro-denominated fixed rate notes. The terms and proceeds of the notes were as follows:

Issuance of European Medium Term Notes

	Effective interest rate	Principal amount EUR millions	Net proceeds CHF millions
Fixed rate 2% EUR notes due 2018	2.07%	1,000	1,201
Total		**1,000**	**1,201**

Swiss franc-denominated bonds. On 23 March 2012 the Group completed an offering of Swiss franc-denominated fixed rate and floating rate bonds. The terms and proceeds of the bonds were as follows:

Issuance of Swiss franc-denominated bonds

	Effective interest rate	Principal amount CHF millions	Net proceeds CHF millions
Floating rate 3-month CHF LIBOR +0.2% bonds due 2013	0.36%	400	400
Fixed rate 1% bonds due 2018	1.04%	600	598
Fixed rate 1.625% bonds due 2022	1.64%	500	499
Total		**1,500**	**1,497**

Issuance of bonds and notes – 2011

The Group did not issue any bonds or notes during the interim period of 2011.

Cash inflows from issuance of bonds and notes in millions of CHF

	Six months ended 30 June 2012	2011
European Medium Term Note programme euro-denominated notes	1,201	–
Swiss franc-denominated bonds	1,497	–
Total cash inflows from issuance of bonds and notes	**2,698**	**–**

Redemption and repurchase of bonds and notes – 2012

Redemption of Swiss franc-denominated bonds. On the due date of 23 March 2012 the Group redeemed bonds with a principal amount outstanding of 2,198 million Swiss francs at the original issue amount plus accrued original issue discount ('OID'). The effective interest rate of these bonds was 2.88%. The cash outflow was 2,198 million Swiss francs and there was no gain or loss recorded on the redemption.

Partial repurchase of euro-denominated notes. On 23 March 2012 the Group completed a tender offer for a nominal amount of 782 million euros of the 4.625% fixed rate notes due 4 March 2013 with a total principal amount outstanding of 4,288 million euros. The cash outflow was 981 million Swiss francs, plus accrued interest. The loss on repurchase of the notes was 39 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 8 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 47 million Swiss francs was recorded within financing costs (see Note 4). The effective interest rate of the notes repurchased was 5.53%.

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 30 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 87 million Swiss francs was recorded within financing costs (see Note 4). The effective interest rate of the notes repurchased was 5.53%.

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

	Six months ended 30 June	
	2012	2011
Swiss franc-denominated bonds	(2,198)	–
European Medium Term Note programme euro-denominated notes	(981)	(1,197)
US dollar-denominated notes	–	(1,861)
Total	**(3,179)**	**(3,058)**

Collateral agreements

As disclosed in Note 26 to the Annual Financial Statements, the Group has entered into various currency swaps for certain non-US dollar debt bonds and notes that were issued in 2009. Collateral agreements were entered into with the counterparties to the currency swaps to mitigate counterparty risk. As the fair value of the derivative instruments moved down during the first half of 2012, due mainly to a stronger US dollar compared to the euro, a total of 0.3 billion Swiss francs cash collateral was delivered by the Group during the interim period (2011: 0.8 billion Swiss francs delivered to the Group). This collateral delivered was recorded as a decrease in cash and a corresponding decrease in accrued liabilities/increase in other current assets. The carrying value of other current assets in respect of these agreements at 30 June 2012 was 0.1 billion Swiss francs (31 December 2011: accrued liabilities of 0.2 billion Swiss francs). The realised gain on derivatives was 0.1 billion Swiss francs (2011: realised gain of 0.4 billion Swiss francs) and relates mainly to hedges on the non-US dollar-denominated bonds and notes.

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. Committed credit lines of 3.9 billion euros are available as a back-stop line. The maturity of the notes under the program cannot exceed 365 days from the date of issuance. At 30 June 2012 unsecured commercial paper notes with a principal of 1,001 million US dollars and an average interest rate of 0.14% were outstanding.

Movements in obligations under commercial paper programmes in millions of CHF

Six months ended 30 June 2012	
At 1 January 2012	1,022
Cash proceeds (payments), net	(80)
Currency translation effects	24
At 30 June 2012	**966**

12. Equity

Share capital and non-voting equity securities *(Genussscheine)*

The authorised and called-up share capital of the Group and the number of issued non-voting equity securities have not changed during the interim period. The weighted average number of shares and non-voting equity securities in issue during the interim period was 847 million (2011: 850 million).

Dividends

On 6 March 2012 the shareholders approved the distribution of a dividend of 6.80 Swiss francs per share and non-voting equity security (2011: 6.60 Swiss francs) in respect of the 2011 business year. The distribution to holders of outstanding shares and non-voting equity securities totalled 5,770 million Swiss francs (2011: 5,614 million Swiss francs) and has been recorded against retained earnings in 2012.

Own equity instruments

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. These derivative instruments consist of call options that are exercisable at any time up to their maturity.

Own equity instruments in equivalent number of non-voting equity securities

	30 June 2012 (millions)	31 December 2011 (millions)
Non-voting equity securities	15.4	15.1
Derivative instruments	8.9	9.9
Total	**24.3**	**25.0**

The Group holds none of its own shares.

Retained earnings

In addition to net income attributable to Roche shareholders of 4,255 million Swiss francs (2011: 5,151 million Swiss francs) and the dividend payments described above, retained earnings also includes actuarial losses on defined benefit post-employment plans of 900 million Swiss francs, after tax (2011: losses of 162 million Swiss francs, after tax). These were based on updated actuarial calculations for major plans and arose from a fall in discount rates since the end of 2011.

13. Statement of cash flows

Cash generated from operations in millions of CHF

	Six months ended 30 June	
	2012	2011
Net income	4,368	5,259
Add back non-operating (income) expense		
– Associates	2	–
– Financial income [4]	(239)	(373)
– Financing costs [4]	1,058	1,165
– Income taxes [5]	1,143	1,409
Operating profit	**6,332**	**7,460**
Depreciation of property, plant and equipment [2]	939	928
Amortisation of intangible assets [2]	266	267
Impairment of goodwill [2]	185	–
Impairment of intangible assets [2]	477	64
Impairment of property, plant and equipment [2]	438	50
Impairment of net assets-held-for-sale [7]	–	117
Operating expenses for defined benefit post-employment plans	91	172
Operating expenses for equity-settled equity compensation plans	163	168
Net (income) expense for provisions	1,015	339
Bad debt expense	61	64
Inventory write-downs	204	93
Other adjustments	32	(124)
Cash generated from operations	**10,203**	**9,598**

14. Subsidiaries and associates

Divestment of subsidiaries – 2012

There were no divestments of subsidiaries in the interim period of 2012.

Divestment of subsidiaries – 2011

Effective 31 May 2011 the Group sold its wholly owned subsidiary Roche Vitamins, Inc. ('RVI') to a third party for 4 million Swiss francs in cash. As a result of the sale RVI is no longer part of the Roche Group. A gain of 4 million Swiss francs was recognised from this disposal and is included in general and administration expenses in the Corporate operating segment.

Review Report of the Statutory Auditor

To the Board of Directors of Roche Holding Ltd, Basel

Introduction. We have been engaged to review the accompanying consolidated balance sheet of Roche Holding Ltd as at 30 June 2012 and the related consolidated statements of income, comprehensive income, cash flows and changes in equity for the six-month period then ended, and selected explanatory notes (the interim consolidated financial statements) on pages 46 to 70. The Board of Directors is responsible for the preparation and presentation of these interim consolidated financial statements in accordance with International Accounting Standard 34 'Interim Financial Reporting'. Our responsibility is to express a conclusion on these interim consolidated financial statements based on our review.

Scope of Review. We conducted our review in accordance with International Standard on Review Engagements 2410, 'Review of Interim Financial Information Performed by the Independent Auditor of the Entity'. A review of interim financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion. Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim consolidated financial statements as at 30 June 2012 are not prepared, in all material respects, in accordance with International Accounting Standard 34 'Interim Financial Reporting'.

KPMG

KPMG AG

Ian Starkey
Licensed Audit Expert
Auditor in Charge

François Rouiller
Licensed Audit Expert

Basel, 24 July 2012

Supplementary Information

Supplementary 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 for the year ended 31 December 2011 on pages 118 to 119. The Group 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 plans (see Note 7) are excluded.
- Amortisation and impairment of goodwill and intangible assets (see Notes 8 and 9) 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 2012.
- 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 the 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. Additional commentary to the adjustment items is given in the Financial Review.

Core results reconciliation – six months ended 30 June 2012 in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	Alliances & business combinations	Legal & environmental	Normalisation of ECP tax benefit	Core
Sales	22,423	–	–	–	–	–	–	22,423
Royalties and other operating income	880	–	–	–	–	–	–	880
Cost of sales	(6,048)	105	248	29	–	–	–	(5,666)
Marketing and distribution	(4,104)	96	3	–	–	–	–	(4,005)
Research and development	(4,958)	452	15	448	–	–	–	(4,043)
General and administration	(1,861)	430	–	185	(39)	337	–	(948)
Operating profit	**6,332**	**1,083**	**266**	**662**	**(39)**	**337**	**–**	**8,641**
Associates	(2)	–	–	–	–	–	–	(2)
Financial income	239	–	–	–	–	–	–	239
Financing costs	(1,058)	–	–	–	–	–	–	(1,058)
Profit before taxes	**5,511**	**1,083**	**266**	**662**	**(39)**	**337**	**–**	**7,820**
Income taxes	(1,143)	(309)	(91)	(157)	(3)	(101)	19	(1,785)
Net income	**4,368**	**774**	**175**	**505**	**(42)**	**236**	**19**	**6,035**
Attributable to								
– Roche shareholders	4,255	774	175	505	(42)	236	19	5,922
– Non-controlling interests	113	–	–	–	–	–	–	113

Core results reconciliation – six months ended 30 June 2011 in millions of CHF

	IFRS	Global restructuring	Intangibles amortisation	Intangibles impairment	Alliances & business combinations	Legal & environmental	Global issues	Normalisation of ECP tax benefit	Core
Sales	21,671	–	–	–	–	–	–	–	21,671
Royalties and other operating income	796	–	–	–	–	–	–	–	796
Cost of sales	(6,098)	91	256	32	–	–	60	–	(5,659)
Marketing and distribution	(3,858)	16	2	–	–	–	1	–	(3,839)
Research and development	(3,985)	71	9	32	–	–	–	–	(3,873)
General and administration	(1,066)	213	–	–	3	2	3	–	(845)
Operating profit	**7,460**	**391**	**267**	**64**	**3**	**2**	**64**	**–**	**8,251**
Associates	–	–	–	–	–	–	–	–	–
Financial income	373	–	–	–	–	–	–	–	373
Financing costs	(1,165)	–	–	–	–	–	–	–	(1,165)
Profit before taxes	**6,668**	**391**	**267**	**64**	**3**	**2**	**64**	**–**	**7,459**
Income taxes	(1,409)	(116)	(89)	(24)	(1)	(1)	(27)	29	(1,638)
Net income	**5,259**	**275**	**178**	**40**	**2**	**1**	**37**	**29**	**5,821**
Attributable to									
– Roche shareholders	5,151	274	178	40	2	1	22	29	5,697
– Non-controlling interests	108	1	–	–	–	–	15	–	124

Divisional Core results reconciliation – six months ended 30 June 2012 in millions of CHF

	IFRS	Global restruc-turing	Intangibles amorti-sation	Intangibles impairment	Alliances & business combi-nations	Legal & environ-mental	Core
Pharmaceuticals							
Sales	17,409	–	–	–	–	–	17,409
Royalties and other operating income	802	–	–	–	–	–	802
Cost of sales	(3,640)	66	75	13	–	–	(3,486)
Marketing and distribution	(2,791)	40	–	–	–	–	(2,751)
Research and development	(4,472)	423	14	448	–	–	(3,587)
General and administration	(870)	400	–	–	(44)	16	(498)
Operating profit	**6,438**	**929**	**89**	**461**	**(44)**	**16**	**7,889**
Diagnostics							
Sales	5,014	–	–	–	–	–	5,014
Royalties and other operating income	78	–	–	–	–	–	78
Cost of sales	(2,408)	39	173	16	–	–	(2,180)
Marketing and distribution	(1,313)	56	3	–	–	–	(1,254)
Research and development	(486)	29	1	–	–	–	(456)
General and administration	(421)	21	–	185	5	6	(204)
Operating profit	**464**	**145**	**177**	**201**	**5**	**6**	**998**
Corporate							
General and administration	(570)	9	–	–	–	315	(246)
Operating profit	**(570)**	**9**	**–**	**–**	**–**	**315**	**(246)**

Divisional Core results reconciliation – six months ended 30 June 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	16,815	–	–	–	–	–	–	16,815
Royalties and other operating income	746	–	–	–	–	–	–	746
Cost of sales	(3,846)	78	69	32	–	–	60	(3,607)
Marketing and distribution	(2,681)	15	–	–	–	–	1	(2,665)
Research and development	(3,543)	61	8	32	–	–	–	(3,442)
General and administration	(671)	204	–	–	2	–	3	(462)
Operating profit	**6,820**	**358**	**77**	**64**	**2**	**–**	**64**	**7,385**
Diagnostics								
Sales	4,856	–	–	–	–	–	–	4,856
Royalties and other operating income	50	–	–	–	–	–	–	50
Cost of sales	(2,252)	13	187	–	–	–	–	(2,052)
Marketing and distribution	(1,177)	1	2	–	–	–	–	(1,174)
Research and development	(442)	10	1	–	–	–	–	(431)
General and administration	(194)	5	–	–	1	2	–	(186)
Operating profit	**841**	**29**	**190**	**–**	**1**	**2**	**–**	**1,063**
Corporate								
General and administration	(201)	4	–	–	–	–	–	(197)
Operating profit	**(201)**	**4**	**–**	**–**	**–**	**–**	**–**	**(197)**

Core EPS

	Six months ended 30 June	
	2012	2011
Core net income (CHF millions)		
Core net income attributable to Roche shareholders	5,922	5,697
Increase in non-controlling interests' share of core net income, assuming all outstanding Chugai stock options exercised	(1)	–
Net income used to calculate diluted earnings per share	**5,921**	**5,697**
Per share information (millions of shares and non-voting equity securities)		
Weighted average number of shares and non-voting equity securities in issue	847	850
Adjustment for assumed exercise of equity compensation plans, where dilutive	6	3
Weighted average number of shares and non-voting equity securities in issue used to calculate diluted earnings per share	**853**	**853**
Core earnings per share (diluted) (CHF)	**6.94**	**6.68**

Supplementary operating free cash flow information

Divisional operating free cash flow information in millions of CHF

Six months ended 30 June	Pharmaceuticals 2012	Pharmaceuticals 2011	Diagnostics 2012	Diagnostics 2011	Corporate 2012	Corporate 2011	Group 2012	Group 2011
Depreciation, amortisation and impairments								
Depreciation of property, plant and equipment	531	545	405	380	3	3	939	928
Amortisation of intangible assets	89	77	177	190	–	–	266	267
Impairment of property, plant and equipment	431	48	7	2	–	–	438	50
Impairment of goodwill	–	–	185	–	–	–	185	–
Impairment of intangible assets	461	64	16	–	–	–	477	64
Impairment of net assets-held-for-sale	–	117	–	–	–	–	–	117
Total	**1,512**	**851**	**790**	**572**	**3**	**3**	**2,305**	**1,426**
Other adjustments								
Add back								
– Expenses for equity-settled equity compensation plans	141	147	16	15	6	6	163	168
– Net (income) expense for provisions	577	293	117	46	321	–	1,015	339
– Net gain from disposals	(74)	(92)	4	1	–	(4)	(70)	(95)
– Non-cash working capital and other items	188	122	97	4	(1)	–	284	126
Deduct								
– Net cash flow from equity-settled equity compensation plans	(60)	(4)	(12)	(1)	(2)	(1)	(74)	(6)
– Utilisation of provisions	(314)	(513)	(53)	(48)	(3)	(2)	(370)	(563)
– Proceeds from disposals	88	313	25	22	–	–	113	335
Total	**546**	**266**	**194**	**39**	**321**	**(1)**	**1,061**	**304**
Operating profit cash adjustments	**2,058**	**1,117**	**984**	**611**	**324**	**2**	**3,366**	**1,730**
EBITDA								
Core operating profit	7,889	7,385	998	1,063	(246)	(197)	8,641	8,251
Depreciation and impairment of property, plant and equipment – core basis	523	512	402	380	3	3	928	895
EBITDA – core basis	**8,412**	**7,897**	**1,400**	**1,443**	**(243)**	**(194)**	**9,569**	**9,146**
– margin, % of sales	48.3	47.0	27.9	29.7	–	–	42.7	42.2

Supplementary balance sheet information

Net operating assets to balance sheet reconciliation 30 June 2012 in millions of CHF

	Pharmaceuticals	Diagnostics	Corporate	Taxation and Treasury	Roche Group
Property, plant and equipment	11,122	4,511	128	–	15,761
Goodwill	2,285	5,492	–	–	7,777
Intangible assets	2,249	2,372	–	–	4,621
Inventories	3,516	1,996	1	–	5,513
Provisions	(2,436)	(525)	(456)	–	(3,417)
Associates	–	–	–	22	22
Current income tax net assets	–	–	–	(2,053)	(2,053)
Deferred income tax net assets	–	–	–	2,965	2,965
Post-employment benefit net assets	–	–	–	(6,104)	(6,104)
Marketable securities	–	–	–	5,114	5,114
Cash and cash equivalents	–	–	–	4,106	4,106
Debt	–	–	–	(26,553)	(26,553)
Other net assets					
– Net working capital	2,956	1,598	–	–	4,554
– Long-term net operating assets	280	(100)	(2)	–	178
– Other	–	–	–	(408)	(408)
Total net assets	**19,972**	**15,344**	**(329)**	**(22,911)**	**12,076**

Roche Securities

Number of shares and non-voting equity securities

	30 June 2012	31 December 2011
Number of shares	160,000,000	160,000,000
Number of non-voting equity securities	702,562,700	702,562,700
Total	**862,562,700**	**862,562,700**
Number of own non-voting equity securities *(Genussscheine)* held	(15,367,514)	(15,084,967)
Total in issue	**847,195,186**	**847,477,733**

Data per share and non-voting equity security in CHF

		Six months ended 30 June 2012	2011
Diluted earnings per share and non-voting equity security		4.99	6.04
Core earnings per share and non-voting equity security		6.94	6.68
Stock price of share	Opening	166.60	142.80
	High	176.60	161.00
	Low	157.10	129.80
	Period end	170.70	148.50
Stock price of non-voting equity security	Opening	159.20	137.00
	High	168.70	150.50
	Low	149.20	125.30
	Period end	163.60	140.70

Market capitalisation in millions of CHF

	30 June 2012	31 December 2011	30 June 2011
Period end	139,737	136,102	120,587

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 Swiss Exchange. Roche Holding Ltd has no restrictions as to ownership of its shares or non-voting equity securities.

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