## Pharmaceuticals legal cases

**Accutane.** Hoffmann-La Roche Inc. ('HLR') and various other Roche affiliates have been named as defendants in numerous legal actions in the US and elsewhere relating to the acne medication Accutane. The litigation alleges that Accutane caused certain serious conditions, including, but not limited to, inflammatory bowel disease ('IBD'), birth defects and psychiatric disorders. In 2009 HLR announced that, following a re-evaluation of its portfolio of medicines that are now available from generic manufacturers, rapidly declining brand sales in the US and high costs from personal-injury lawsuits that it continues to defend vigorously, it had decided to immediately discontinue the manufacture and distribution of the product in the US.

All of the actions pending in federal court alleging IBD were consolidated for pre-trial proceedings in a Multi-District Litigation ('MDL') in the US District Court for the Middle District of Florida, Tampa Division. In August 2015 the MDL was closed. During the pendency of the MDL the District Court granted summary judgment in favour of HLR for all of the federal IBD cases that had proceeded and all were affirmed by the US Court of Appeals for the Eleventh Circuit. All of the actions pending in state court in New Jersey alleging IBD were consolidated for pre-trial proceedings in the Superior Court of New Jersey, Law Division, Atlantic County.

Since 1 January 2015 there have been approximately 2,720 cases dismissed in the US and at 31 December 2015 HLR was defending approximately 3,900 actions involving approximately 3,990 plaintiffs brought in various federal and state courts throughout the US for personal injuries allegedly resulting from their use of Accutane.

In February 2015 the Superior Court of New Jersey, Law Division, Atlantic County, held an eight-day evidentiary hearing on whether plaintiffs' experts can testify that Accutane causes Crohn's disease. On 20 February 2015 the Superior Court barred plaintiffs' experts because their methods did not meet the requirements for scientific reliability. On 8 May 2015 the Superior Court entered an order dismissing with prejudice an agreed-upon list of 2,076 Crohn's disease cases that were subject to the Superior Court's February 2015 order. On 12 May 2015 the Superior Court entered an order granting summary judgment and dismissing 18 cases filed by New Jersey residents on the basis that the drug label was adequate as a matter of law since 2002. In July 2015 the Superior Court granted HLR's motion for summary judgment as to the adequacy of the label for post-2002 ingestion cases in 44 other jurisdictions. The Superior Court applied New Jersey law to all of the jurisdictions and granted HLR's motion dismissing approximately 511 cases. In the alternative, the Superior Court applied the home state law and granted summary judgment in 24 jurisdictions and denied it in 20 jurisdictions; this would have resulted in 389 cases being dismissed. The plaintiffs have appealed the decisions related to Crohn's disease and the drug label.

At 31 December 2015 juries in the New Jersey Superior Court have ruled in favour of the plaintiff in eight cases, assessing compensatory damages totalling USD 59 million. For the eight cases that were ruled in favour of the plaintiff by the Superior Court, HLR is in the process of appealing three cases (USD 20 million) and five cases have had their verdicts reversed in favour of HLR (USD 39 million), of which one case (USD 25 million) is on appeal to the New Jersey Supreme Court.

Additional trials may be scheduled for 2016. Individual trial results depend on a variety of factors, including many that are unique to the particular case and therefore the trial results to date may not be predictive of future trial results. The Group continues to defend vigorously the remaining personal injury cases and claims.

**Avastin/Lucentis investigations.** On 14 February 2013 the Italian Antitrust Authority ('AGCM') announced an investigation to determine whether Roche, Genentech and Novartis had entered into an agreement to restrict competition in the Italian market for drugs, with reference in particular to Avastin (marketed by Roche) and Lucentis (marketed by Novartis). Avastin and Lucentis are two different drugs that were developed and approved for different therapeutic purposes and contain different active pharmaceutical ingredients. On 5 March 2014 the AGCM issued a verdict that alleges that Roche and Novartis colluded to artificially differentiate Avastin and Lucentis in order to foster the sales of Lucentis in Italy. The AGCM fined Roche EUR 90.5 million and Novartis EUR 92 million. Roche appealed the AGCM verdict to the Tribunale Amministrativo Regionale del Lazio ('TAR'). On 2 December 2014 the TAR upheld the decision by the AGCM. Roche strongly disagrees with the verdict of the TAR and has appealed. On 30 May 2014 the Italian Ministry of Health notified Roche S.p.A. of its intention to seek damages related to this matter. In July 2014 Roche paid the EUR 90.5 million fine under protest to avoid additional penalty fees and recorded an expense within general and administration. The fine and related interest will be reimbursed if Roche wins the case. The outcome of these matters cannot be determined at this time.

**Tarceva subpoena.** On 2 November 2011 Genentech received a subpoena from the US Department of Justice ('DOJ'), requesting documents and information related to the promotion of Tarceva, a prescription product initially approved for the treatment of locally advanced or metastatic non-small cell lung cancer after failure of at least one prior chemotherapy regimen, and later approved for additional indications. Genentech is cooperating with the associated investigation. On 6 May 2014 government representatives presented for the first time the government's civil liability theory, specifically that Genentech allegedly participated in the off-label promotion of Tarceva causing the submission of false claims for reimbursement under the Civil False Claims Act. On 14 August 2015 the government closed its criminal investigation against Genentech. Genentech continues to have discussions with the government on its civil liability theory. The outcome of this matter cannot be determined at this time.

**Rituxan arbitration.** In October 2008 Genentech and Biogen Idec Inc. filed a complaint in California against Sanofi-Aventis Deutschland GmbH, Sanofi-Aventis US LLC and Sanofi-Aventis US Inc. ('Sanofi') seeking a declaratory judgment that certain Genentech products, including Rituxan, do not infringe Sanofi's US Patent Nos. 5,849,522 and 6,218,140 and that the '522 and '140 patents are invalid. Sanofi alleged that Rituxan and another Genentech product infringe certain claims of the '522 and '140 patents. In March 2011 the district court ruled as a matter of law that Genentech and Biogen Idec do not infringe the asserted patent claims. In May 2011 Sanofi appealed the court's non-infringement ruling. The appellate court affirmed the district court's judgment of no patent infringement.

In addition in October 2008 Sanofi affiliate Hoechst GmbH ('Hoechst') filed with the ICC International Court of Arbitration (Paris) a request for arbitration with Genentech, relating to a terminated patent-licence agreement between one of Hoechst's predecessors and Genentech that pertained to the above-mentioned patents and related patents outside the US. Hoechst sought payment of patent-licence royalties on sales of certain Genentech products, including Rituxan, damages for breach of contract, and other relief. In various arbitral awards in September 2012 and February 2013, the arbitrator found Genentech liable to Hoechst for patent-licence royalties on Rituxan, and he awarded the royalties and interest that Hoechst had sought. In February 2013 the Group recorded a back royalty expense of CHF 42 million, net of the assumed reimbursement of a portion of the Group's obligation by its co-promotion partner in the US.

Hoechst initiated proceedings in the US, France and Germany seeking to enforce the arbitral awards. In October 2013 Genentech paid the awarded royalties and interest to Hoechst under protest. Genentech is seeking annulment of the arbitral awards through proceedings it initiated in the Court of Appeal of Paris. There was a hearing in those proceedings in June 2014. In September 2014 the Paris Court of Appeal stayed the annulment proceedings to seek guidance from the EU Court of Justice on a specific legal question that had been raised by Genentech relating to the arbitral award's non-compliance under EU competition laws. In November 2014 Hoechst filed notices of appeal to the French Supreme Court seeking to review the Paris Court of Appeal's decision to seek guidance from the EU Court of Justice. On 18 November 2015 the French Supreme Court denied Hoechst's challenge to the decision of the Paris Court of Appeals to refer the specific legal question to the EU Court of Justice. The EU Court of Justice held a hearing on 20 January 2016 and a judgment is expected later in 2016. The outcome of this matter cannot be determined at this time.

**Average Wholesale Prices litigation.** HLR and Roche Laboratories Inc. ('RLI'), along with approximately 50 other brand and generic pharmaceutical companies, have been named as defendants in several legal actions in the US relating to the pricing of pharmaceutical drugs and State Medicaid reimbursement. The primary allegation in these litigations is that the pharmaceutical companies misrepresented or otherwise reported inaccurate Average Wholesale Prices ('AWP') and/or Wholesale Acquisition Costs ('WAC') for their drugs, which prices were allegedly relied upon by the States in calculating Medicaid reimbursements to entities such as retail pharmacies. The States, through their respective Attorney General, are seeking repayment of the amounts they claim were over-reimbursed. The time period associated with these cases is 1991 through 2005. At 31 December 2015 HLR and RLI are defending one AWP action filed in the state of New Jersey. HLR and RLI are vigorously defending themselves and no trial date has been set. The outcome of this matter cannot be determined at this time.

**Boniva litigation.** HLR, Genentech and various other Roche affiliates (collectively 'Roche') have been named as defendants in numerous legal actions in the US and Canada relating to the post-menopausal osteoporosis medication Boniva. In these litigations, the plaintiffs allege that Boniva caused either osteonecrosis of the jaw or atypical femoral fractures. At 31 December 2015 Roche is defending approximately 290 actions involving approximately 340 plaintiffs brought in federal and state courts throughout the US and one action brought in the Court of the Queen's Bench, Province of Saskatchewan, Canada, for personal injuries allegedly resulting from the use of Boniva. All of these cases are in the early discovery stages of litigation. Individual trial results depend on a variety of factors, including many that are unique to the particular case. Roche is vigorously defending itself in these matters. The outcome of these matters cannot be determined at this time.

**EMA investigation.** On 23 October 2012 the European Medicines Agency ('EMA') announced that it would start an infringement procedure to investigate allegations regarding an alleged breach of medicines safety reporting obligations in relation to 19 centrally authorised medicines. On 19 November 2013 the EMA announced the results of the Pharmacovigilance Risk Assessment Committee assessment of Roche's medicines. The EMA found no impact regarding the benefit-risk balance of any of Roche's medicines and confirmed the benefit-risk profiles based on available safety information. The EMA and other health authorities have confirmed all medicines remain authorised without changes to the treatment advice for patients and healthcare professionals. All corrective and preventative actions resulting from the inspections are being implemented. A re-inspection by authorities in November 2013 led to certain findings which Roche is now addressing. On 14 April 2014 the EMA issued its report to the European Commission that summarises the EMA's findings in relation to the investigation. On 6 July 2015 the European Commission issued a notification to the EMA, returning the case file to the EMA for a new period of inquiry. The EMA has a year to adopt a revised report for submission to the European Commission. The outcome of this matter cannot be determined at this time.

# 20. Debt

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

| | 2015 | 2014 |
|---|---|---|
| At 1 January | 25,714 | 18,643 |
| Proceeds from issue of bonds and notes | 2,663 | 6,407 |
| Redemption and repurchase of bonds and notes | (4,058) | (3,662) |
| Increase (decrease) in commercial paper | (791) | 2,342 |
| Increase (decrease) in other debt | 130 | 124 |
| Net (gains) losses on redemption and repurchase of bonds and notes [3] | 79 | 215 |
| Loss on major debt restructuring [3] | 381 | 429 |
| Amortisation of debt discount [3] | 19 | 20 |
| Business combinations [5] | 14 | – |
| Net foreign currency transaction (gains) losses | (448) | (592) |
| Currency translation effects and other | (452) | 1,788 |
| **At 31 December** | **23,251** | **25,714** |
| | | |
| Bonds and notes | 20,007 | 21,589 |
| Commercial paper | 2,501 | 3,314 |
| Amounts due to banks and other financial institutions | 717 | 626 |
| Finance lease obligations [7] | 5 | 177 |
| Other borrowings | 21 | 8 |
| **Total debt** | **23,251** | **25,714** |
| | | |
| Long-term debt | 17,100 | 19,347 |
| Short-term debt | 6,151 | 6,367 |
| **Total debt** | **23,251** | **25,714** |

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

**Bonds and notes**

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

| | Effective interest rate Underlying instrument | Effective interest rate Including hedging | 2015 | 2014 | 2013 |
|---|---|---|---|---|---|
| **US dollar notes – fixed rate** | | | | | |
| 1.35% notes due 29 September 2017, principal USD 0.85 billion (ISIN: US771196BC54) | 1.41% | 0.62% | 842 | 841 | – |
| 6.0% notes due 1 March 2019, principal USD 4.5 billion, outstanding USD 1.46 billion (ISIN: USU75000AM82 and US771196AS16) | 6.37% | 6.01% | 1,499 | 2,606 | 3,702 |
| 2.25% notes due 29 September 2019, principal USD 1.5 billion (ISIN: US771196BA98) | 2.34% | 0.92% | 1,501 | 1,493 | – |
| 2.875% notes due 29 September 2021, principal USD 1.3 billion (ISIN: US771196BB71) | 2.98% | n/a | 1,280 | 1,279 | – |
| 3.35% notes due 30 September 2024, principal USD 1.65 billion (ISIN: US771196BE11) | 3.40% | n/a | 1,629 | 1,629 | – |
| 3.0% notes due 10 November 2025, principal USD 1.0 billion (ISIN: US771196BJ08) | 3.14% | n/a | 979 | – | – |
| 7.0% notes due 1 March 2039, principal USD 2.5 billion, outstanding USD 1.27 billion (ISIN: USU75000AN65 and US771196AU61) | 7.43% | n/a | 1,213 | 1,536 | 2,145 |
| 4.0% notes due 28 November 2044, principal USD 0.65 billion (ISIN: US771196BH42) | 4.16% | n/a | 630 | 630 | – |
| **US dollar notes – floating rate** | | | | | |
| Notes due 29 September 2017, principal USD 0.3 billion (ISIN: US771196BD38) | 0.61% | n/a | 296 | 296 | – |
| Notes due 30 September 2019, principal USD 0.5 billion (ISIN: US771196AZ58) | 0.90% | n/a | 494 | 494 | – |
| **Euro Medium Term Note programme – fixed rate** | | | | | |
| 5.5% notes due 4 March 2015, principal GBP 1.25 billion (ISIN: XS0415625283) | 5.70% | 5.78% | – | 739 | 1,316 |
| 5.625% notes due 4 March 2016, principal EUR 2.75 billion, outstanding EUR 2.1 billion (ISIN: XS0415624120) | 5.70% | 6.36% | 2,270 | 2,523 | 2,571 |
| 2.0% notes due 25 June 2018, principal EUR 1.0 billion (ISIN: XS0760139773) | 2.07% | n/a | 1,079 | 1,200 | 1,222 |
| 2.0% notes due 13 March 2020, principal USD 600 million (ISIN: XS1197832089) | 2.12% | 0.89% | 595 | – | – |
| 6.5% notes due 4 March 2021, principal EUR 1.75 billion, outstanding EUR 1.32 billion (ISIN: XS0415624716) | 6.66% | 6.97% | 1,415 | 2,090 | 2,128 |
| 5.375% notes due 29 August 2023, principal GBP 250 million, outstanding GBP 200 million (ISIN: XS0175478673) | 5.46% | n/a | 291 | 305 | 290 |
| 0.875% notes due 25 February 2025, principal EUR 1.0 billion (ISIN: XS1195056079) | 0.93% | n/a | 1,076 | – | – |
| **Swiss franc bonds – fixed rate** | | | | | |
| 4.5% bonds due 23 March 2017, principal CHF 1.5 billion (ISIN: CH0039139263) | 4.77% | n/a | 1,495 | 1,492 | 1,489 |
| 1.0% bonds due 21 September 2018, principal CHF 0.6 billion (ISIN: CH0180513068) | 1.04% | 0.86% | 603 | 602 | 599 |
| 1.625% bonds due 23 September 2022, principal CHF 0.5 billion (ISIN: CH0180513183) | 1.64% | 1.36% | 499 | 499 | 499 |
| **Genentech Senior Notes** | | | | | |
| 4.75% Senior Notes due 15 July 2015, principal USD 1.0 billion (ISIN: US368710AG46) | 4.87% | n/a | – | 989 | 888 |
| 5.25% Senior Notes due 15 July 2035, principal USD 500 million, outstanding USD 325 million (ISIN: US368710AC32) | 5.39% | n/a | 321 | 346 | 444 |
| **Total bonds and notes** | | | **20,007** | **21,589** | **17,293** |

**Bonds and notes maturity** in millions of CHF

| | 2015 | 2014 | 2013 |
|---|---|---|---|
| Within one year | 2,931 | 2,409 | 1,040 |
| Between one and two years | 2,634 | 2,523 | 2,204 |
| Between two and three years | 1,682 | 2,629 | 2,571 |
| Between three and four years | 2,832 | 1,802 | 1,489 |
| Between four and five years | 595 | 3,912 | 1,821 |
| More than five years | 9,333 | 8,314 | 8,168 |
| **Total bonds and notes** | **20,007** | **21,589** | **17,293** |

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

| | 2015 | 2014 | 2013 |
|---|---|---|---|
| US dollar notes | 85 | 103 | 109 |
| Euro notes | 15 | 19 | 24 |
| Swiss franc bonds | 9 | 10 | 13 |
| Pound sterling notes | 2 | 3 | 5 |
| **Total unamortised discount** | **111** | **135** | **151** |

### Issuance of bonds and notes – 2015

On 25 February 2015 the Group issued EUR 1.0 billion fixed rate notes with a coupon of 0.875% under the Euro Medium Term Note programme. The notes will mature on 25 February 2025 and are listed on the Luxembourg Stock Exchange. The Group received CHF 1,072 million aggregate net proceeds from the issuance and sale of these fixed notes.

On 13 March 2015 the Group issued USD 600 million fixed rate notes with a coupon of 2.0% under the Euro Medium Term Note programme. The notes will mature on 13 March 2020 and are listed on the Luxembourg Stock Exchange. The Group received CHF 598 million aggregate net proceeds from the issuance and sale of these fixed notes.

On 10 November 2015 the Group completed an offering of USD 1.0 billion fixed rate notes with a coupon of 3.0%. The notes will mature on 10 November 2025. The Group received CHF 993 million aggregate net proceeds from the issuance and sale of these fixed notes.

**Major debt restructuring.** In September 2015 the Group decided to do a major debt restructuring. The Group raised net proceeds of CHF 993 million through the debt offering described above. All newly issued debt is senior, unsecured and has been guaranteed by Roche Holding Ltd. The Group repurchased USD 337 million 7.0% fixed rate notes due 1 March 2039, USD 543 million 6.0% fixed rate notes due 1 March 2019, USD 25 million 5.25% fixed rate Genentech Senior Notes due 15 July 2035 and EUR 433 million 6.5% fixed rate notes due 4 March 2021. This major debt restructuring resulted in a loss on repurchase of CHF 381 million.

### Issuance of bonds and notes – 2014

**InterMune acquisition.** In September 2014 the Group financed the InterMune acquisition (see Note 5) by a combination of the Group's own funds, debt securities and commercial paper. The Group raised net proceeds of approximately CHF 5.5 billion through a debt offering as described below. All newly issued debt is senior, unsecured and has been guaranteed by Roche Holding Ltd.

On 29 September 2014 the Group completed an offering of US dollar notes and received CHF 5,451 million aggregate net proceeds from the issuance and sale of these fixed and floating rate notes. The terms and proceeds of the notes were as follows:

Issuance of US dollar fixed and floating rate notes

| | Principal amount USD millions | Net proceeds CHF millions |
|---|---|---|
| Floating rate notes due 2017 | 300 | 285 |
| Floating rate notes due 2019 | 500 | 475 |
| Fixed rate 1.35% notes due 2017 | 850 | 808 |
| Fixed rate 2.25% notes due 2019 | 1,500 | 1,422 |
| Fixed rate 2.875% notes due 2021 | 1,300 | 1,231 |
| Fixed rate 3.35% notes due 2024 | 1,300 | 1,230 |
| **Total** | **5,750** | **5,451** |

**Major debt restructuring.** In November 2014 the Group had a major debt restructuring. The Group raised net proceeds of approximately CHF 1.0 billion through a debt offering as described below. All newly issued debt is senior, unsecured and has been guaranteed by Roche Holding Ltd. This debt was used to repurchase USD 150 million 5.25% fixed rate Genentech Senior Notes due 15 July 2035 and USD 894 million 7.0% fixed rate notes due 1 March 2039. This major debt restructuring resulted in a loss on repurchase of CHF 429 million.

On 28 November 2014 the Group completed an offering of US dollar notes and received CHF 956 million aggregate net proceeds from the issuance and sale of these fixed rate notes. The terms and proceeds of the notes were as follows:

Issuance of US dollar fixed rate notes

| | Principal amount USD millions | Net proceeds CHF millions |
|---|---|---|
| Fixed rate 3.35% notes due 2024 | 350 | 342 |
| Fixed rate 4.0% notes due 2044 | 650 | 614 |
| **Total** | **1,000** | **956** |

### Redemption and repurchase of bonds and notes – 2015

**Partial redemption of US dollar notes.** On 19 December 2014 the Group resolved to exercise its option to call for early partial redemption of the 6.0% fixed rate notes due 1 March 2019. On 26 March 2015 the Group redeemed an outstanding principal of USD 600 million 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 CHF 669 million, plus accrued interest and there was an additional CHF 7 million loss recorded on redemption. The effective interest rate of these notes was 6.37%.

On 24 September 2015 the Group completed a tender offer to repurchase USD 337 million of the 7.0% fixed rate notes due 1 March 2039. The cash outflow was CHF 480 million, plus accrued interest and there was a loss on repurchase of CHF 158 million. The effective interest rate of these notes was 7.43%.

On 24 September 2015 the Group completed a tender offer to repurchase USD 543 million of the 6.0% fixed rate notes due 1 March 2019. The cash outflow was CHF 607 million, plus accrued interest and there was a loss on repurchase of CHF 78 million. The effective interest rate of these notes was 6.37%.

**Redemption of pound sterling notes.** On the due date of 4 March 2015 the Group redeemed the 5.5% fixed rate notes with a principal of GBP 481 million. The cash outflow was CHF 710 million, plus accrued interest. The effective interest rate of these notes was 5.70%.

**Redemption of Genentech Senior Notes.** On the due date of 15 July 2015 the Group redeemed the 4.75% fixed rate Senior Notes with a principal of USD 1.0 billion. The cash outflow was CHF 945 million, plus accrued interest. The effective interest rate of these notes was 4.87%.

**Partial repurchase of Genentech Senior Notes.** On 24 September 2015 the Group repurchased USD 25 million of the 5.25% fixed rate Senior Notes due on 15 July 2035. The cash outflow was CHF 29 million, plus accrued interest and there was a loss on repurchase of CHF 4 million. The effective interest rate of these notes was 5.39%.

**Partial repurchase of euro notes.** On 6 November 2015 the Group repurchased EUR 433 million of the 6.5% fixed rate notes due on 4 March 2021. The cash outflow was CHF 618 million, plus accrued interest and there was a loss on repurchase of CHF 141 million. The effective interest rate of these notes was 6.66%.

**Early partial redemption of US dollar-denominated notes in 2016.** On 30 December 2015 the Group resolved to exercise its option to call for early partial redemption of the 6.0% fixed rate notes due 1 March 2019. The Group will redeem an outstanding principal of USD 600 million on 24 March 2016 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. A cash outflow of approximately USD 661 million, plus accrued interest, is expected on redemption. The Group has revised the carrying value of these notes to take into account the changes to the amounts and timings of the estimated cash flows. The revised carrying value of these notes at 31 December 2015 is USD 669 million (CHF 661 million). The increase in carrying value of USD 74 million (CHF 72 million) is recorded within financing costs (see Note 3) as a loss on redemption. The effective interest rate of these notes is 6.37%.

### Redemption and repurchase of bonds and notes – 2014

During 2014 the Group completed the early repurchase of GBP 419 million of fixed rate notes and completed the early redemption of USD 2.5 billion of fixed rate notes.

### Cash flows from issuance, redemption and repurchase of bonds and notes

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

| | 2015 | 2014 |
|---|---|---|
| Euro Medium Term Note programme – Euro notes | 1,072 | – |
| Euro Medium Term Note programme – US dollar notes | 598 | – |
| US dollar notes | 993 | 6,407 |
| **Total cash inflows from issuance of bonds and notes** | **2,663** | **6,407** |

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

| | 2015 | 2014 |
|---|---|---|
| Euro Medium Term Note programme – Pound sterling notes | (710) | (653) |
| Euro Medium Term Note programme – Euro notes | (618) | – |
| US dollar notes | (2,730) | (3,009) |
| **Total cash outflows from redemption and repurchase of bonds and notes** | **(4,058)** | **(3,662)** |

### Commercial paper

**Roche Holdings, Inc. commercial paper program.** Roche Holdings, Inc. has an established commercial paper program under which it can issue up to USD 7.5 billion of unsecured commercial paper notes guaranteed by Roche Holding Ltd. During the second half of 2015 the existing committed credit line available as a back-stop supporting the commercial paper program has been changed from EUR 3.9 billion to USD 4.5 billion and a new committed credit line of USD 3.0 billion has been added. The total committed credit lines that are available as a back-stop supporting the commercial paper program are USD 7.5 billion at 31 December 2015. The maturity of the notes under the program cannot exceed 365 days from the date of issuance. At 31 December 2015 unsecured commercial paper notes with a principal amount of USD 2.5 billion and an average interest rate of 0.2% were outstanding.

Movements in commercial paper obligations in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| At 1 January | 3,314 | 702 |
| Net cash proceeds (payments) | (791) | 2,342 |
| Currency translation effects | (22) | 270 |
| **At 31 December** | **2,501** | **3,314** |

**Amounts due to banks and other financial institutions**

These amounts are denominated in various currencies, notably in Chinese renminbi and Argentine peso, and the average interest rate was 4.95% (2014: 7.42%). At 31 December 2015 the amounts outstanding of CHF 717 million (2014: CHF 626 million) are due within one year.

# 21. Equity attributable to Roche shareholders

Changes in equity attributable to Roche shareholders in millions of CHF

| | | | Reserves | | | |
|---|---|---|---|---|---|---|
| | Share capital | Retained earnings | Fair value | Hedging | Translation | Total |
| **Year ended 31 December 2014** | | | | | | |
| At 1 January 2014 | 160 | 25,643 | 123 | 95 | (6,727) | 19,294 |
| Net income recognised in income statement | – | 9,332 | – | – | – | 9,332 |
| Available-for-sale investments | | | | | | |
| – Fair value gains (losses) taken to equity | – | – | 314 | – | – | 314 |
| – Transferred to income statement | – | – | (274) | – | – | (274) |
| – Income taxes [4] | – | – | (3) | – | – | (3) |
| – Non-controlling interests | – | – | (3) | – | – | (3) |
| Cash flow hedges | | | | | | |
| – Gains (losses) taken to equity | – | – | – | (587) | – | (587) |
| – Transferred to income statement [a)] | – | – | – | 521 | – | 521 |
| – Income taxes [4] | – | – | – | 25 | – | 25 |
| – Non-controlling interests | – | – | – | 13 | – | 13 |
| Currency translation of foreign operations | | | | | | |
| – Exchange differences | – | – | 9 | 9 | (273) | (255) |
| – Non-controlling interests | – | – | – | – | 32 | 32 |
| Defined benefit plans | | | | | | |
| – Remeasurement gains (losses) [25] | – | (2,720) | – | – | – | (2,720) |
| – Limit on asset recognition [25] | – | 6 | – | – | – | 6 |
| – Income taxes [4] | – | 702 | – | – | – | 702 |
| – Non-controlling interests | – | 5 | – | – | – | 5 |
| **Other comprehensive income, net of tax** | **–** | **(2,007)** | **43** | **(19)** | **(241)** | **(2,224)** |
| **Total comprehensive income** | **–** | **7,325** | **43** | **(19)** | **(241)** | **7,108** |
| Dividends | – | (6,617) | – | – | – | (6,617) |
| Equity compensation plans, net of transactions in own equity | – | (195) | – | – | – | (195) |
| Changes in non-controlling interests [5] | – | (4) | – | – | – | (4) |
| **At 31 December 2014** | **160** | **26,152** | **166** | **76** | **(6,968)** | **19,586** |

a) The entire amount transferred to the income statement was reported in 'Other financial income (expense)'.

**Changes in equity attributable to Roche shareholders** in millions of CHF

| | | | | | Reserves | |
|---|---|---|---|---|---|---|
| | Share capital | Retained earnings | Fair value | Hedging | Translation | Total |
| **Year ended 31 December 2015** | | | | | | |
| At 1 January 2015 | 160 | 26,152 | 166 | 76 | (6,968) | 19,586 |
| Net income recognised in income statement | – | 8,863 | – | – | – | 8,863 |
| Available-for-sale investments | | | | | | |
| – Fair value gains (losses) taken to equity | – | – | 94 | – | – | 94 |
| – Transferred to income statement | – | – | (117) | – | – | (117) |
| – Income taxes [4] | – | – | 17 | – | – | 17 |
| – Non-controlling interests | – | – | (6) | – | – | (6) |
| Cash flow hedges | | | | | | |
| – Gains (losses) taken to equity | – | – | – | (466) | – | (466) |
| – Transferred to income statement [a)] | – | – | – | 382 | – | 382 |
| – Income taxes [4] | – | – | – | 29 | – | 29 |
| – Non-controlling interests | – | – | – | 5 | – | 5 |
| Currency translation of foreign operations | | | | | | |
| – Exchange differences | – | – | 1 | 1 | (1,009) | (1,007) |
| – Non-controlling interests | – | – | – | – | 23 | 23 |
| Defined benefit plans | | | | | | |
| – Remeasurement gains (losses) [25] | – | 353 | – | – | – | 353 |
| – Limit on asset recognition [25] | – | (14) | – | – | – | (14) |
| – Income taxes [4] | – | (110) | – | – | – | (110) |
| – Non-controlling interests | – | 5 | – | – | – | 5 |
| **Other comprehensive income, net of tax** | **–** | **234** | **(11)** | **(49)** | **(986)** | **(812)** |
| **Total comprehensive income** | **–** | **9,097** | **(11)** | **(49)** | **(986)** | **8,051** |
| Dividends | – | (6,807) | – | – | – | (6,807) |
| Equity compensation plans, net of transactions in own equity | – | 155 | – | – | – | 155 |
| Changes in non-controlling interests [5] | – | (6) | – | – | – | (6) |
| **At 31 December 2015** | **160** | **28,591** | **155** | **27** | **(7,954)** | **20,979** |

a) The entire amount transferred to the income statement was reported in 'Other financial income (expense)'.

### Genentech transaction

The Group completed the purchase of the non-controlling interests in Genentech effective 26 March 2009. Based on the International Accounting Standard 27 'Separate Financial Statements' (IAS 27) and consistent with the International Financial Reporting Standard 10 'Consolidated Financial Statements' (IFRS 10), which was adopted by the Group in 2013, this transaction was accounted for in full as an equity transaction. As a consequence, the carrying amount of the consolidated equity of the Group at that time was reduced by CHF 52.2 billion, of which CHF 8.5 billion was allocated to eliminate the book value of Genentech non-controlling interests. This accounting effect significantly impacted the Group's net equity, but has no effect on the Group's business or its dividend policy.

### Share capital

At 31 December 2015 the authorised and issued share capital of Roche Holding Ltd, which is the Group's parent company, consisted of 160 million shares with a nominal value of CHF 1.00 each, as in the preceding year. The shares are bearer shares and the Group does not maintain a register of shareholders. Based on information supplied to the Group, a shareholder group with pooled voting rights owns 45.01% (2014: 45.01%) of the issued shares. On 24 March 2011 the shareholder group announced that it would continue the shareholder pooling agreement existing since 1948 with a modified shareholder composition. The shareholder group with pooled voting rights now holds 72,018,000 shares, corresponding to 45.01% of the shares issued. This figure does not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, now holds 8,091,900 shares representing 5.057% of the voting rights independently of the pool. This is further described in Note 30. Based on information supplied to the Group, Novartis Ltd, Basel, and its affiliates own 33.333% (participation below 33⅓%) of the issued shares (2014: 33.333%).

### Non-voting equity securities *(Genussscheine)*

At 31 December 2015, 702,562,700 non-voting equity securities have been authorised and were in issue as in the preceding year. Under Swiss company law these non-voting equity securities have no nominal value, are not part of the share capital and cannot be issued against a contribution which would be shown as an asset in the balance sheet of Roche Holding Ltd. Each non-voting equity security confers the same rights as any of the shares to participate in the net profit and any remaining proceeds from liquidation following repayment of the nominal value of the shares and, if any, participation certificates. In accordance with the law and the Articles of Incorporation of Roche Holding Ltd, the Company is entitled at all times to exchange all or some of the non-voting equity securities into shares or participation certificates.

### Dividends

On 3 March 2015 the shareholders approved the distribution of a dividend of CHF 8.00 per share and non-voting equity security (2014: CHF 7.80) in respect of the 2014 business year. The distribution to holders of outstanding shares and non-voting equity securities totalled CHF 6,807 million (2014: CHF 6,617 million) and has been recorded against retained earnings in 2015. The Board of Directors has proposed dividends for the 2015 business year of CHF 8.10 per share and non-voting equity security which, if approved, would result in a total distribution to shareholders of CHF 6,987 million. This is subject to approval at the Annual General Meeting on 1 March 2016.

### Own equity instruments

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

| | 2015 (millions) | 2014 (millions) |
|---|---|---|
| Shares | 0.1 | 0.4 |
| Non-voting equity securities | 10.5 | 12.4 |
| **Total** | **10.6** | **12.8** |

Own equity instruments are recorded within equity at original purchase cost. At 31 December 2015 the fair value of shares was CHF 19 million and non-voting equity securities was CHF 2.9 billion. Own equity instruments are held for the Group's potential conversion obligations that may arise from the Group's equity compensation plans (see Note 26).

### Reserves

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

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

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

# 22. Subsidiaries

### Chugai

Effective 1 October 2002 the Roche Group and Chugai completed an alliance to create a leading research-driven Japanese pharmaceutical company, which was formed by the merger of Chugai and Roche's Japanese pharmaceuticals subsidiary, Nippon Roche. The merged company is known as Chugai.

**Consolidated subsidiary.** Chugai is a fully consolidated subsidiary of the Group. This is based on the Group's interest in Chugai at 31 December 2015 of 61.39% (2014: 61.46%) and the Roche relationship with Chugai that is founded on the Basic Alliance, Licensing and Research Collaboration Agreements.

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

Chugai summarised financial information in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| **Income statement** | | |
| Sales[2] | 3,726 | 3,777 |
| Royalties and other operating income[2] | 243 | 213 |
| **Total revenues** | **3,969** | **3,990** |
| Operating profit[2] | 669 | 623 |
| **Balance sheet** | | |
| Non-current assets | 1,890 | 1,781 |
| Current assets | 4,669 | 4,467 |
| Non-current liabilities | (212) | (229) |
| Current liabilities | (1,087) | (944) |
| **Total net assets** | **5,260** | **5,075** |
| **Cash flows** | | |
| Cash flows from operating activities | 500 | 320 |
| Cash flows from investing activities | (360) | (124) |
| Cash flows from financing activities | (226) | (211) |

**Dividends.** The dividends distributed to third parties holding Chugai shares during 2015 totalled CHF 87 million (2014: CHF 81 million) and have been recorded against non-controlling interests (see Note 23). Dividends paid by Chugai to Roche are eliminated on consolidation as inter-company items.

**Roche's relationship with Chugai.** Chugai has entered into certain agreements with Roche, which are discussed below:

(1) Basic Alliance Agreement – As part of the Basic Alliance Agreement signed in December 2001, Roche and Chugai entered into certain arrangements covering the future operation and governance of Chugai. Amongst other matters these cover the following areas:
- The structuring of the alliance.
- Roche's rights as a shareholder.
- Roche's rights to nominate members of Chugai's Board of Directors.
- Certain limitations to Roche's ability to buy or sell Chugai's common stock.

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

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

The Rest of the World Umbrella Rights Agreement (excluding Japan and South Korea) signed in May 2002 was revised and the Amended and Restated Rest of the World Umbrella Rights Agreement (excluding Japan, South Korea and Taiwan) was signed in August 2014. Under this Agreement Roche has the right of first refusal on the development and marketing of Chugai's development compounds in markets outside Japan, excluding South Korea and Taiwan.

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

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

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

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

### Foundation Medicine

On 7 April 2015 the Group acquired a controlling interest in Foundation Medicine, Inc. ('FMI') and entered into an Investor Rights Agreement, a Research and Development Collaboration Agreement and several Commercial Collaboration Agreements.

**Consolidated subsidiary.** FMI is a fully consolidated subsidiary of the Group. This is based on the Group's interest in FMI at 31 December 2015 of 60.88% and the Roche relationship with FMI that is founded on the above agreements. The common stock of FMI is publicly traded and is listed on the Nasdaq under the stock code 'FMI'. FMI prepares financial statements in accordance with US GAAP which are filed on a quarterly basis with the SEC. Due to certain consolidation entries there are differences between FMI's stand-alone US GAAP results and the results of FMI as consolidated by the Roche Group in accordance with IFRS.

**Dividends.** There were no dividends distributed to third parties holding FMI shares during 2015.

### Divestment of subsidiary

On 23 April 2015 the Group sold its wholly owned subsidiary Marcadia Biotech, Inc. to a third party as part of the previously announced Pharmaceuticals Division's Research and Development reorganisation. The total consideration received was a USD 3 million convertible note. The total loss on divestment of CHF 23 million is reported in global restructuring costs in the Roche Pharmaceuticals operating segment and is shown in the table below. On 14 October 2015 the convertible note was repaid and the Group received USD 6 million in cash and recognised a gain of USD 3 million.

**Loss on divestment of subsidiary – 2015** in millions of CHF

| | |
|---|---|
| **Consideration** | **3** |
| Intangible assets[9] | 26 |
| **Total net assets disposed** | **26** |
| **Loss on divestment of subsidiary[6]** | **(23)** |

# 23. Non-controlling interests

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

| | 2015 | 2014 |
|---|---|---|
| At 1 January | 1,972 | 1,947 |
| Net income recognised in income statement | | |
| – Chugai | 197 | 179 |
| – Other non-controlling interests | (4) | 24 |
| **Total net income recognised in income statement** | **193** | **203** |
| Available-for-sale investments | 6 | 3 |
| Cash flow hedges | (5) | (13) |
| Currency translation of foreign operations | (23) | (32) |
| Remeasurements of defined benefit plans | (5) | (5) |
| **Other comprehensive income, net of tax** | **(27)** | **(47)** |
| **Total comprehensive income** | **166** | **156** |
| Business combinations [5] | 238 | – |
| Dividends to non-controlling shareholders | | |
| – Chugai [22] | (87) | (81) |
| – Other non-controlling interests | (21) | (59) |
| Equity compensation plans, net of transactions in own equity | 9 | 5 |
| Changes in non-controlling interests | 4 | 4 |
| Equity contribution by non-controlling interests | 40 | – |
| **At 31 December** | **2,321** | **1,972** |
| Chugai | 1,978 | 1,900 |
| Other non-controlling interests | 343 | 72 |
| **Total non-controlling interests** | **2,321** | **1,972** |

# 24. Employee benefits

**Employee remuneration** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Wages and salaries | 9,412 | 8,948 |
| Social security costs | 980 | 971 |
| Defined contribution plans [25] | 421 | 364 |
| Operating expenses for defined benefit plans [25] | 533 | 385 |
| Equity compensation plans [26] | 403 | 350 |
| Termination costs [6] | 283 | 279 |
| Other employee benefits | 793 | 620 |
| **Employee remuneration included in operating results** | **12,825** | **11,917** |
| Net interest cost of defined benefit plans [25] | 176 | 201 |
| **Total employee remuneration** | **13,001** | **12,118** |

Other employee benefits consist mainly of life insurance schemes and certain other insurance schemes providing medical coverage and other long-term and short-term disability benefits.

# 25. Pensions and other post-employment benefits

The Group's objective is to provide attractive and competitive post-employment benefits to employees, while at the same time ensuring that the various plans are appropriately financed and managing any potential impacts on the Group's long-term financial position. Most employees are covered by pension plans sponsored by Group companies. The nature of such plans varies according to legal regulations, fiscal requirements and market practice in the countries in which the employees are employed. Post-employment benefit plans are classified for IFRS as 'defined contribution plans' if the Group pays fixed contributions into a separate fund or to a third-party financial institution and will have no further legal or constructive obligation to pay further contributions. All other plans are classified as 'defined benefit plans'.

### Defined contribution plans

Defined contribution plans are funded through payments by employees and by the Group to funds administered by third parties. The Group's expenses for these plans were CHF 421 million (2014: CHF 364 million). No assets or liabilities are recognised in the Group's balance sheet in respect of such plans, apart from regular prepayments and accruals of the contributions withheld from employees' wages and salaries and of the Group's contributions. The Group's major defined contribution plans are in the US, notably the US Roche 401(k) Savings Plan.

### Defined benefit plans

Plans are usually established as trusts independent of the Group and are funded by payments from Group companies and by employees. In some cases, notably for the major defined benefit plans in Germany, the plans are unfunded and the Group pays pensions to retired employees directly from its own financial resources. Plans are usually governed by a senior governing body, such as a Board of Trustees, which is typically composed of both employee and employer representatives. Funding of these plans is determined by local regulations using independent actuarial valuations. Separate independent actuarial valuations, together with a semi-annual update, are prepared in accordance with the requirements of IAS 19 for use in the Group's financial statements. The Group's major pension plans are located in Switzerland, the US and Germany, which in total account for 83% of the Group's defined benefit obligation (2014: 82%).

**Pension plans in Switzerland.** Current pension arrangements for employees in Switzerland are made through plans governed by the Swiss Federal Occupational Old Age, Survivors and Disability Pension Act ('BVG'). The Group's pension plans are administered by separate legal foundations, which are funded by regular employee and company contributions. The final benefit is contribution-based with certain minimum guarantees. Due to these minimum guarantees, the Swiss plans are treated as defined benefit plans for the purposes of these IFRS financial statements, although they have many of the characteristics of defined contribution plans. Where there is an under-funding this may be remedied by various measures such as increasing employee and company contributions, lowering the interest rate on retirement account balances, reducing prospective benefits and a suspension of the early withdrawal facility.

**Pension plans in the US.** The Group's major defined benefit plans in the US have been closed to new members since 2007. New employees in the US now join the defined contribution plan. The largest of the remaining defined benefit plans are funded pension plans, including separate plans originating from the Nutley, Palo Alto and Indianapolis sites, together with smaller unfunded supplementary retirement plans. The benefits are based on the highest average annual rate of earnings during a specified period and length of employment. The plans are non-contributory for employees, with the Group making periodic payments to the plans. In 2015 payments made by the Group were USD 130 million (2014: USD 130 million). Where there is an under-funding, this would normally be remedied by additional company contributions.

**Pension plans in Germany.** The Group's major pension arrangements in Germany are governed by the Occupational Pensions Act ('BetrAVG'). These plans are unfunded and the Group pays pensions to retired employees directly from its own financial resources. These plans are non-contributory for employees. The benefits are based on final salary and length of employment. These plans have been closed to new members since 2007. They have been replaced by a new plan which is funded by regular employee and company contributions and administered through a contractual trust agreement. The final benefit is contribution-based with a minimum guarantee. Due to this minimum guarantee, this plan is treated as a defined benefit plan for the purposes of these IFRS financial statements, although it has many of the characteristics of a defined contribution plan.

**Pension plans in the Rest of the World.** These represent approximately 11% of the Group's defined benefit obligation (2014: 12%) and consist of a number of smaller plans in various countries. Of these the largest are the pension plans at Chugai, which are independently managed by Chugai, and the main pension plan in the United Kingdom. The Chugai plans are fully described in Chugai's own IFRS financial statements. The UK pension plan is funded by regular employee and company contributions, with benefits based on final salary and length of employment. This plan has been closed to new members since 2003 and has been replaced with a defined contribution plan.

**Other post-employment benefit ('OPEB') plans.** These represent approximately 6% of the Group's defined benefit obligation (2014: 6%) and consist mostly of post-retirement healthcare and life insurance schemes, mainly in the US. These plans are mainly unfunded or are contributory for employees, with the Group reimbursing retired employees directly from its own financial resources. The Group's major defined benefit OPEB plans in the US have been closed to new members since 2011. Part of the costs of these plans is reimbursable under the Medicare Prescription Drug Improvement and Modernization Act of 2003. There is no statutory funding requirement for these plans. The Group is funding these plans to the extent that it is tax efficient. In 2015 there were no payments made by the Group to these plans (2014: none). At 31 December 2015 the IFRS funding status was 45% (2014: 50%), including reimbursement rights, for the funded OPEB plans in the US.

Defined benefit plans: income statement in millions of CHF

| | | | 2015 | | | 2014 |
|---|---|---|---|---|---|---|
| | Pension plans | Other post-employment benefit plans | Total expense | Pension plans | Other post-employment benefit plans | Total expense |
| Current service cost | 504 | 14 | 518 | 370 | 11 | 381 |
| Past service (income) cost | 20 | – | 20 | 4 | – | 4 |
| Settlement (gain) loss | (5) | – | (5) | – | – | – |
| **Total operating expenses** | **519** | **14** | **533** | **374** | **11** | **385** |
| Net interest cost of defined benefit plans | 146 | 30 | 176 | 176 | 25 | 201 |
| **Total expense recognised in income statement** | **665** | **44** | **709** | **550** | **36** | **586** |

**Funding status**

The funding of the Group's various defined benefit plans is the responsibility of a senior governing body, such as a Board of Trustees, and the sponsoring employer, and is managed based on local statutory valuations, which follow the legislation and requirements of the respective jurisdiction in which the plan is established. Qualified independent actuaries carry out statutory actuarial valuations on a regular basis. The actuarial assumptions determining the funding status on the statutory basis are regularly assessed by the local senior governing body. The funding status is closely monitored at a corporate level. The unfunded plans are mainly those in the Group's German affiliates, where the fully reserved pension obligations are invested in the local affiliate's operations.

The IFRS funded status of the funded defined benefit plans remained stable at 79% (2014: 80%).

Reimbursement rights are linked to the post-employment medical plans in the US and represent the expected reimbursement of the medical expenditure provided under the Medicare Prescription Drug Improvement and Modernization Act of 2003.

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

| | Pension plans | Other post-employment benefit plans | 2015 Total | Pension plans | Other post-employment benefit plans | 2014 Total |
|---|---|---|---|---|---|---|
| Funded plans | | | | | | |
| – Fair value of plan assets | 12,056 | 307 | 12,363 | 12,110 | 342 | 12,452 |
| – Defined benefit obligation | (14,664) | (965) | (15,629) | (14,587) | (1,014) | (15,601) |
| **Over (under) funding** | **(2,608)** | **(658)** | **(3,266)** | **(2,477)** | **(672)** | **(3,149)** |
| Unfunded plans | | | | | | |
| – Defined benefit obligation | (4,277) | (267) | (4,544) | (5,056) | (258) | (5,314) |
| **Total funding status** | **(6,885)** | **(925)** | **(7,810)** | **(7,533)** | **(930)** | **(8,463)** |
| Limit on asset recognition | (14) | – | (14) | – | – | – |
| Reimbursement rights | – | 125 | 125 | – | 160 | 160 |
| **Net recognised asset (liability)** | **(6,899)** | **(800)** | **(7,699)** | **(7,533)** | **(770)** | **(8,303)** |
| Reported in balance sheet | | | | | | |
| – Defined benefit plan assets | 517 | 125 | 642 | 531 | 160 | 691 |
| – Defined benefit plan liabilities | (7,416) | (925) | (8,341) | (8,064) | (930) | (8,994) |

**Plan assets**

The responsibility for the investment strategies of funded plans is with the senior governance body such as the Board of Trustees. Asset-liability studies are performed regularly for all major pension plans. These studies examine the obligations from post-retirement benefit plans, and evaluate various investment strategies with respect to key financial measures such as expected returns, expected risks, expected contributions, and expected funded status of the plan in an interdependent way. The goal of an asset-liability study is to select an appropriate asset allocation for the funds held within the plan. The investment strategy is developed to optimise expected returns, to manage risks and to contain fluctuations in the statutory funded status. Asset-liability studies include strategies to match the cash flows of the assets with the plan obligations. The Group currently does not use annuities or longevity swaps to manage longevity risk.

Plan assets are managed using internal and external asset managers. The actual performance is continually monitored by the pension fund governance bodies as well as being closely monitored at a corporate level. In these financial statements the difference between the interest income and actual return on plan assets is a remeasurement that is recorded directly to other comprehensive income. During 2015 the actual return on plan assets was a loss of CHF 7 million (2014: gain of CHF 1,020 million).

The recognition of pension assets is limited to the present value of any economic benefits available from refunds from the plans or reductions in future contributions to the plans.

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

| | Pension plans | Other post-employment benefit plans | 2015 Total | Pension plans | Other post-employment benefit plans | 2014 Total |
|---|---|---|---|---|---|---|
| At 1 January | 12,110 | 502 | 12,612 | 10,833 | 431 | 11,264 |
| Interest income on plan assets | 239 | 18 | 257 | 335 | 20 | 355 |
| Remeasurements on plan assets | (252) | (44) | (296) | 652 | 43 | 695 |
| Currency translation effects | (108) | (2) | (110) | 330 | 51 | 381 |
| Employer contributions | 400 | (3) | 397 | 370 | (6) | 364 |
| Employee contributions | 109 | 4 | 113 | 100 | – | 100 |
| Benefits paid – funded plans | (437) | (41) | (478) | (495) | (35) | (530) |
| Benefits paid – settlements | – | – | – | (11) | – | (11) |
| Administration costs | (5) | (2) | (7) | (4) | (2) | (6) |
| **At 31 December** | **12,056** | **432** | **12,488** | **12,110** | **502** | **12,612** |

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

| | 2015 | 2014 |
|---|---|---|
| Equity securities | 4,294 | 4,592 |
| Debt securities | 4,858 | 4,580 |
| Property | 1,474 | 1,292 |
| Cash and money market instruments | 186 | 447 |
| Other investments | 1,551 | 1,541 |
| **At 31 December** | **12,363** | **12,452** |

Assets are invested in a variety of different classes in order to maintain a balance between risk and return as follows:

- Equity and debt securities which mainly have quoted market prices (Level 1 fair value hierarchy).
- Property which is mainly in private and commercial property funds which mainly have other observable inputs (Level 2 fair value hierarchy).
- Cash and money market instruments which are mainly invested with financial institutions with a credit rating no lower than A.
- Other investments which mainly consist of alternatives, mortgages, commodities and insurance contracts. These are used for risk management purposes and mainly have other observable inputs (Level 2 fair value hierarchy) and unobservable inputs (Level 3 fair value hierarchy).

Included within the fair value of plan assets are the Group's shares and non-voting securities with a fair value of CHF 171 million (2014: CHF 153 million) and debt instruments issued by the Group with a fair value of CHF 19 million (2014: CHF 19 million).

**Defined benefit obligation**

The defined benefit obligation is calculated using the projected unit credit method. This reflects service rendered by employees to the dates of valuation and incorporates actuarial assumptions primarily regarding discount rates used in determining the present value of benefits, projected rates of remuneration growth and mortality rates. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds or government bonds in countries where there is not a deep market in corporate bonds. The corporate or government bonds are denominated in the currency in which the benefits will be paid, and have maturity terms approximating to the terms of the related pension obligation.

The Group's final salary-based defined benefit pension plans in the US, Germany and the United Kingdom have been closed to new participants. Active employees that had been members of these pension plans at the time these were closed to new participants continue to accrue benefits in the final salary-based defined benefit pension plans. New employees in the US and UK now join the Group's defined contribution plans, while new employees in Germany join the contribution-based plan with a minimum guarantee. The defined benefit pension plans in Switzerland, where the final benefit is contribution-based with a minimum guarantee, remain open to new employees. As a result, the proportion of the defined benefit obligation which relates to these closed plans is expected to decrease in the future.

**Defined benefit plans: defined benefit obligation** in millions of CHF

| | Pension plans | Other post-employment benefit plans | 2015 Total | Pension plans | Other post-employment benefit plans | 2014 Total |
|---|---|---|---|---|---|---|
| At 1 January | 19,643 | 1,272 | 20,915 | 15,710 | 974 | 16,684 |
| Current service cost | 504 | 14 | 518 | 370 | 11 | 381 |
| Interest cost | 385 | 48 | 433 | 511 | 45 | 556 |
| Remeasurements: | | | | | | |
| – demographic assumptions | 9 | (10) | (1) | 117 | 109 | 226 |
| – financial assumptions | (756) | (64) | (820) | 3,102 | 67 | 3,169 |
| – experience adjustments | 140 | 32 | 172 | 25 | (5) | 20 |
| Currency translation effects | (620) | (5) | (625) | 350 | 122 | 472 |
| Other movements [19] | 72 | – | 72 | – | – | – |
| Employee contributions | 109 | 4 | 113 | 100 | – | 100 |
| Benefits paid – funded plans | (437) | (41) | (478) | (495) | (35) | (530) |
| Benefits paid – unfunded plans | (123) | (18) | (141) | (140) | (16) | (156) |
| Benefits paid – settlements | – | – | – | (11) | – | (11) |
| Past service (income) cost | 20 | – | 20 | 4 | – | 4 |
| Settlement (gain) loss | (5) | – | (5) | – | – | – |
| **At 31 December** | **18,941** | **1,232** | **20,173** | **19,643** | **1,272** | **20,915** |
| **Composition of plan** | | | | | | |
| Active members | 9,328 | 336 | 9,664 | 9,561 | 332 | 9,893 |
| Deferred vested members | 1,549 | 48 | 1,597 | 1,754 | 86 | 1,840 |
| Retired members | 8,064 | 848 | 8,912 | 8,328 | 854 | 9,182 |
| **At 31 December** | **18,941** | **1,232** | **20,173** | **19,643** | **1,272** | **20,915** |
| **Plans by geography** | | | | | | |
| Switzerland | 8,806 | – | 8,806 | 8,440 | – | 8,440 |
| United States | 4,060 | 1,188 | 5,248 | 4,044 | 1,231 | 5,275 |
| Germany | 3,801 | – | 3,801 | 4,667 | – | 4,667 |
| Rest of the World | 2,274 | 44 | 2,318 | 2,492 | 41 | 2,533 |
| **At 31 December** | **18,941** | **1,232** | **20,173** | **19,643** | **1,272** | **20,915** |
| Duration in years | 15.4 | 13.2 | 15.2 | 15.5 | 13.5 | 15.4 |

**Actuarial assumptions**

The actuarial assumptions used in these financial statements are based on the requirements set out in IAS 19 'Employee Benefits'. They are unbiased and mutually compatible estimates of variables that determine the ultimate cost of providing post-employment benefits. They are set on an annual basis by local management, based on advice from actuaries, and are subject to approval by corporate management and the Group's actuaries. Actuarial assumptions consist of demographic assumptions on matters such as mortality and employee turnover, and financial assumptions on matters such as interest rates, salary and benefit levels, inflation rates and costs of medical benefits. The actuarial assumptions vary based upon local economic and social conditions. The actuarial assumptions used in the various statutory valuations may differ from these based on local legal and regulatory requirements.

**Demographic assumptions.** The most significant demographic assumptions relate to mortality rates. The Group's actuaries use mortality tables which take into account historic patterns and expected changes, such as further increases in longevity. Rates of employee turnover, disability and early retirement are based on historical behaviour within Group companies. The average life expectancy assumed now for an individual at the age of 65 is as follows:

Defined benefit plans: average life expectancy for major schemes in years

| Country | Mortality table | Male 2015 | Male 2014 | Female 2015 | Female 2014 |
|---|---|---|---|---|---|
| Switzerland | BVG 2010 generational tables | 21.5 | 21.4 | 24.0 | 23.9 |
| United States | RP-2014 projected with MP-2014 | 22.2 | 22.2 | 23.7 | 23.7 |
| Germany | Heubeck tables 2005G | 18.9 | 18.9 | 22.9 | 22.9 |

**Financial assumptions.** These are based on market expectations for the period over which the obligations are to be settled. The assumptions used in the actuarial valuations are shown below.

Defined benefit plans: financial actuarial assumptions

| | 2015 Weighted average | 2015 Range | 2014 Weighted average | 2014 Range |
|---|---|---|---|---|
| Discount rates | 2.28% | 0.80%–6.50% | 2.21% | 0.94%–6.50% |
| Expected rates of salary increases | 2.76% | 0.00%–5.00% | 2.87% | 2.00%–5.00% |
| Expected rates of pension increases | 0.59% | 0.00%–2.10% | 0.91% | 0.25%–2.20% |
| Expected inflation rates | 1.12% | 0.00%–4.00% | 2.34% | 2.00%–4.00% |
| Immediate medical cost trend rate | 6.98% | 6.10%–7.00% | 7.18% | 6.30%–7.20% |
| Ultimate medical cost trend rate (in 2029) | 4.50% | 4.50% | 4.50% | 4.50% |

Discount rates are determined with reference to interest rates on high-quality corporate bonds or government bonds in countries where there is not a deep market in corporate bonds. Expected rates of salary increases are based on expected inflation rates with an adjustment to reflect the Group's latest expectation of long-term real salary increases. Expected rates of pension increases are generally linked to the expected inflation rate or the funding status of the plan. Expected inflation rates are derived by looking at the level of inflation implied by the financial markets in conjunction with the economists' price inflation forecasts, historic price inflation as well as other economic variables and circumstances. Medical cost trend rates take into account the benefits set out in the plan terms and expected future changes in medical costs. Since the Group's major post-employment medical plans are for US employees, these rates are driven by developments in the US.

**Sensitivity analysis.** The measurement of the net defined benefit obligation is particularly sensitive to changes in the discount rate, inflation rate, expected mortality and medical cost trend rate assumptions. The following table summarises the impact of a change in those assumptions on the present value of the defined benefit obligation.

Defined benefit plans: sensitivity of defined benefit obligation to actuarial assumptions in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| 1 year increase in life expectancy | 606 | 560 |
| **Discount rates** | | |
| 0.25% increase | (733) | (797) |
| 0.25% decrease | 781 | 799 |
| **Expected inflation rates** | | |
| 0.25% increase | 256 | 303 |
| 0.25% decrease | (240) | (323) |
| **Immediate medical cost trend rate** | | |
| 1.00% increase | 153 | 161 |
| 1.00% decrease | (120) | (132) |

Each sensitivity analysis considers the change in one assumption at a time leaving the other assumptions unchanged. This approach shows the isolated effect of changing one individual assumption but does not take into account that some assumptions are related. The method used to carry out the sensitivity analysis is the same as in the prior year.

### Cash flows

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

**Defined benefit plans: cash flows** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Employer contributions, net of reimbursements – funded plans | (397) | (364) |
| Benefits paid – unfunded plans | (141) | (156) |
| **Total cash inflow (outflow)** | **(538)** | **(520)** |

Based on the most recent actuarial valuations, the Group expects that employer contributions for funded plans in 2016 will be approximately CHF 403 million, which includes an estimated CHF 155 million of additional contributions, mostly related to the US defined benefit plans. Benefits paid for unfunded plans in 2016 are estimated to be approximately CHF 142 million, which mostly relate to the German defined benefit plans.

# 26. Equity compensation plans

The Group operates several equity compensation plans, including separate plans at Chugai and Foundation Medicine. IFRS 2 'Share-based Payment' requires that the fair value of all equity compensation plan awards granted to employees be estimated at grant date and recorded as an expense over the vesting period.

**Expenses for equity compensation plans** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Cost of sales | 79 | 61 |
| Marketing and distribution | 94 | 61 |
| Research and development | 140 | 101 |
| General and administration | 90 | 127 |
| **Total operating expenses** | **403** | **350** |
| **Equity compensation plans** | | |
| Roche Stock-settled Stock Appreciation Rights | 196 | 192 |
| Roche Restricted Stock Unit Plan | 154 | 112 |
| Roche Performance Share Plan | 15 | 17 |
| Roche Connect | 16 | 14 |
| Roche Option Plan | 4 | 4 |
| Bonus Stock Awards | 7 | 8 |
| Chugai and Foundation Medicine Plans | 11 | 3 |
| **Total operating expenses** | **403** | **350** |
| of which | | |
| – Equity-settled | 403 | 350 |
| – Cash-settled | – | – |

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

| | 2015 | 2014 |
|---|---|---|
| Roche Option Plan exercises | 41 | 83 |
| Chugai and Foundation Medicine exercises | 14 | 14 |
| Roche Connect costs | (16) | (14) |
| Transactions in own equity | (208) | (895) |
| **Total cash inflow (outflow) from equity-settled equity compensation plans, net of transactions in own equity** | **(169)** | **(812)** |

The net cash outflow from transactions in own equity mainly arises from sales and purchases of equity instruments which are held for the Group's potential conversion obligations that may arise from the Group's equity compensation plans (see Note 21).

### Equity compensation plans

**Roche Stock-settled Stock Appreciation Rights.** The Group issues Stock-settled Stock Appreciation Rights (S-SARs) to certain directors, management and employees selected at the discretion of the Group. The S-SARs give employees the right to receive non-voting equity securities reflecting the value of any appreciation in the market price of the non-voting equity securities between the grant date and the exercise date. Under the Roche S-SAR Plan 180 million S-SARs will be available for issuance over a ten-year period. The rights, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years.

**Roche S-SARs – movement in number of rights outstanding**

| | 2015 | | 2014 | |
|---|---|---|---|---|
| | Number of rights (thousands) | Weighted average exercise price (CHF) | Number of rights (thousands) | Weighted average exercise price (CHF) |
| Outstanding at 1 January | 34,909 | 187.72 | 41,691 | 167.32 |
| Granted | 8,471 | 256.75 | 7,103 | 263.41 |
| Forfeited | (995) | 244.22 | (1,012) | 203.59 |
| Exercised | (6,531) | 168.26 | (12,837) | 161.98 |
| Expired | (40) | 194.50 | (36) | 229.60 |
| **Outstanding at 31 December** | **35,814** | **206.02** | **34,909** | **187.72** |
| – of which exercisable | 20,887 | 173.68 | 17,066 | 158.85 |

**Roche S-SARs – terms of rights outstanding at 31 December 2015**

| Year of grant | Number outstanding (thousands) | Weighted average years remaining contractual life | Rights outstanding Weighted average exercise price (CHF) | Number exercisable (thousands) | Rights exercisable Weighted average exercise price (CHF) |
|---|---|---|---|---|---|
| 2009 | 1,025 | 0.66 | 162.77 | 1,025 | 162.77 |
| 2010 | 2,592 | 1.65 | 152.03 | 2,592 | 152.03 |
| 2011 | 3,769 | 2.18 | 140.20 | 3,769 | 140.20 |
| 2012 | 8,006 | 3.26 | 157.96 | 8,006 | 157.96 |
| 2013 | 6,219 | 4.26 | 214.81 | 3,585 | 214.90 |
| 2014 | 6,173 | 5.26 | 263.49 | 1,898 | 263.51 |
| 2015 | 8,030 | 6.27 | 256.77 | 12 | 256.10 |
| **Total** | **35,814** | **4.15** | **206.02** | **20,887** | **173.68** |

**Roche Restricted Stock Unit Plan.** The Group issues Restricted Stock Units (RSUs) awards to certain directors, management and employees selected at the discretion of the Group. The RSUs, which are non-tradable, represent the right to receive non-voting equity securities which vest only after a three-year period, subject to performance conditions, if any. There are currently no performance conditions on outstanding RSUs at 31 December 2015. Under the Roche RSU Plan 20 million non-voting equity securities will be available for issuance over a ten-year period. The Roche RSU Plan also includes a value adjustment which will be an amount equivalent to the sum of shareholder distributions made by the Group during the vesting period attributable to the number of non-voting equity securities for which an individual award has been granted.

### Roche RSUs – movement in number of awards outstanding

| | 2015 Number of awards (thousands) | 2014 Number of awards (thousands) |
|---|---|---|
| Outstanding at 1 January | 1,392 | 834 |
| Granted | 778 | 724 |
| Forfeited | (136) | (83) |
| Transferred to participants | (82) | (83) |
| **Outstanding at 31 December** | **1,952** | **1,392** |
| – of which vested and transferable | – | – |

**Roche Performance Share Plan.** The Group offers future share and non-voting equity security awards (or, at the discretion of the Board of Directors, their cash equivalent) to certain directors and key senior managers. These are non-tradable equity-settled awards. The programme currently operates in annual three-year cycles. The Roche Performance Share Plan (PSP) includes a value adjustment which will be an amount equivalent to the sum of shareholder distributions made by the Group during the vesting period attributable to the number of shares or non-voting equity securities for which an individual award has been granted. The amount of shares or non-voting equity securities allocated will depend upon the individual's salary level, the achievement of performance targets linked to the Group's Total Shareholder Return (shares and non-voting equity securities combined) relative to the Group's peers during the three-year period from the date of the grant, and the discretion of the Board of Directors. Each award will result in between zero and two shares or non-voting equity securities (before value adjustment), depending upon the achievement of the performance targets.

### Roche Performance Share Plan – terms of outstanding awards at 31 December 2015

| | 2013–2015 | 2014–2016 | 2015–2017 |
|---|---|---|---|
| Number of awards outstanding (thousands) | 92 | 72 | 73 |
| Vesting period | 3 years | 3 years | 3 years |
| Allocated to recipients in | Feb. 2016 | Feb. 2017 | Feb. 2018 |
| Fair value per unit at grant (CHF) | 192.60 | 228.42 | 217.45 |
| **Total fair value at grant (CHF millions)** | **21** | **18** | **17** |

**Roche Connect.** This programme enables all employees worldwide, except for those in the US and certain other countries, to make regular deductions from their salaries to purchase non-voting equity securities. It is administered by independent third parties. The Group contributes to the programme, which allows the employees to purchase non-voting equity securities at a discount (usually 20%). The administrator purchases the necessary non-voting equity securities directly from the market. At 31 December 2015 the administrator held 2.3 million non-voting equity securities (2014: 2.2 million). In 2015 the cost of the plan was CHF 16 million (2014: CHF 14 million).

**Roche Option Plan.** This programme is used in countries where S-SARs are not used. Awards under this plan give employees the right to purchase non-voting equity securities at an exercise price specified at the grant date. The options, which are non-tradable equity-settled awards, have a seven-year duration and vest on a phased basis over three years.

### Roche Option Plan – movement in number of options outstanding

| | 2015 Number of options (thousands) | 2015 Weighted average exercise price (CHF) | 2014 Number of options (thousands) | 2014 Weighted average exercise price (CHF) |
|---|---|---|---|---|
| Outstanding at 1 January | 895 | 184.62 | 1,267 | 168.78 |
| Granted | 185 | 256.61 | 154 | 263.20 |
| Forfeited | (39) | 236.96 | (30) | 190.40 |
| Exercised | (244) | 169.43 | (493) | 167.88 |
| Expired | (3) | 195.80 | (3) | 229.60 |
| **Outstanding at 31 December** | **794** | **203.49** | **895** | **184.62** |
| – of which exercisable | 486 | 173.87 | 489 | 159.78 |

### Roche Option Plan – terms of options outstanding at 31 December 2015

| Year of grant | Number outstanding (thousands) | Weighted average years remaining contractual life | Options outstanding Weighted average exercise price (CHF) | Number exercisable (thousands) | Options exercisable Weighted average exercise price (CHF) |
|---|---|---|---|---|---|
| 2009 | 12 | 0.22 | 153.59 | 12 | 153.59 |
| 2010 | 57 | 1.32 | 168.03 | 57 | 168.03 |
| 2011 | 104 | 2.17 | 140.10 | 104 | 140.10 |
| 2012 | 186 | 3.25 | 157.58 | 186 | 157.58 |
| 2013 | 146 | 4.25 | 214.00 | 86 | 214.00 |
| 2014 | 127 | 5.25 | 263.21 | 41 | 263.21 |
| 2015 | 162 | 6.26 | 256.69 | – | – |
| **Total** | **794** | **4.04** | **203.49** | **486** | **173.87** |

The weighted average share price of Roche non-voting equity securities during the year was CHF 266.58 (2014: CHF 266.91).

**Bonus Stock Awards.** The Chairman of the Board of Directors and the Chief Executive Officer will be granted Bonus Stock Awards in lieu of their cash-settled bonus for the financial year 2015. These will be issued by the end of April 2016. The number of awards and fair value per award will be calculated at the grant date.

#### Fair value measurement

The inputs used in the measurement of the fair values at grant date of the equity compensation plans were as follows:

### Fair value measurement in 2015

| | Roche Stock-settled Stock Appreciation Rights | Roche Restricted Stock Unit Plan | Roche Performance Share Plan | Roche Option Plan |
|---|---|---|---|---|
| Vesting period | Progressively over 3 years | Cliff vesting after 3 years | Cliff vesting after 3 years | Progressively over 3 years |
| Contractual life | 7 years | n/a | n/a | 7 years |
| Number granted during year (thousands) | 8,471 | 778 | 76 | 185 |
| Weighted average fair value (CHF) | 27 | 257 | 217 | 27 |
| Model used | Binomial | Market price[a] | Monte Carlo[b] | Binomial |
| Inputs to option pricing model | | | | |
| – Share price at grant date (CHF) | 257 | 257 | 269 | 257 |
| – Exercise price (CHF) | 257 | – | – | 257 |
| – Expected volatility[c] | 24.7% | n/a | n/a | 24.7% |
| – Expected dividend yield | 6.7% | n/a | n/a | 6.7% |
| – Early exercise factor[d] | 1.32 | n/a | n/a | 1.32 |
| – Expected exit rate | 7.5% | n/a | n/a | 7.5% |

a) The fair value of the Roche RSUs is equivalent to the share price on the date of grant.
b) The input parameters were the covariance matrix between Roche and the other individual companies of the peer group based on a three-year history and a risk-free rate of minus 0.32%. The valuation takes into account the defined rank and performance structure which determines the pay-out of the plan.
c) Volatility was determined primarily by reference to historically observed prices of the underlying equity. Risk-free interest rates are derived from zero coupon swap rates at the grant date taken from Datastream.
d) The early exercise factor describes the ratio between the expected market price at the exercise date and the exercise price at which early exercises can be expected, based on historically observed behaviour.

# 27. Earnings per share and non-voting equity security

### Basic earnings per share and non-voting equity security

| | 2015 | 2014 |
|---|---|---|
| **Net income attributable to Roche shareholders (CHF millions)** | **8,863** | **9,332** |
| Number of shares (millions) [21] | 160 | 160 |
| Number of non-voting equity securities (millions) [21] | 703 | 703 |
| Weighted average number of own shares and non-voting equity securities held (millions) | (12) | (14) |
| **Weighted average number of shares and non-voting equity securities in issue (millions)** | **851** | **849** |
| **Basic earnings per share and non-voting equity security (CHF)** | **10.42** | **10.99** |

### Diluted earnings per share and non-voting equity security

| | 2015 | 2014 |
|---|---|---|
| Net income attributable to Roche shareholders (CHF millions) | 8,863 | 9,332 |
| Increase in non-controlling interests' share of Group net income, assuming all outstanding Chugai stock options exercised (CHF millions) | (1) | (1) |
| **Net income used to calculate diluted earnings per share (CHF millions)** | **8,862** | **9,331** |
| Weighted average number of shares and non-voting equity securities in issue (millions) | 851 | 849 |
| Adjustment for assumed exercise of equity compensation plans, where dilutive (millions) | 11 | 14 |
| **Weighted average number of shares and non-voting equity securities in issue used to calculate diluted earnings per share (millions)** | **862** | **863** |
| **Diluted earnings per share and non-voting equity security (CHF)** | **10.28** | **10.81** |

# 28. Statement of cash flows

### Cash flows from operating activities

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

Cash generated from operations in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Net income | 9,056 | 9,535 |
| Add back non-operating (income) expense | | |
| – Financing costs [3] | 1,574 | 1,821 |
| – Other financial income (expense) [3] | 260 | (246) |
| – Income taxes [4] | 2,931 | 2,980 |
| **Operating profit** | **13,821** | **14,090** |
| Depreciation of property, plant and equipment [7] | 1,968 | 1,917 |
| Amortisation of intangible assets [9] | 1,672 | 706 |
| Impairment of goodwill [8] | – | 874 |
| Impairment of intangible assets [9] | 69 | 1,034 |
| Impairment (reversal) of property, plant and equipment [7] | 191 | 51 |
| Operating (income) expense for defined benefit plans [25] | 533 | 385 |
| Operating expense for equity-settled equity compensation plans [26] | 403 | 350 |
| Net (income) expense for provisions [19] | 978 | 867 |
| Bad debt (reversal) expense | 38 | 76 |
| Inventory write-downs | 480 | 370 |
| Inventory fair value adjustment | 552 | 39 |
| Net (gain) loss on disposal of products | (70) | (466) |
| Other adjustments | 16 | 12 |
| **Cash generated from operations** | **20,651** | **20,305** |

### Cash flows from investing activities

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

Interest and dividends received in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Interest received | 26 | 32 |
| Dividends received | 2 | 3 |
| **Total** | **28** | **35** |

**Cash flows from financing activities**

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

Dividends paid in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Dividends to Roche Group shareholders | (6,807) | (6,617) |
| Dividends to non-controlling shareholders – Chugai | (87) | (81) |
| Dividends to non-controlling shareholders – Other | (21) | (59) |
| Increase (decrease) in dividends payable | (41) | 40 |
| Dividend withholding tax | 2 | (1) |
| **Total** | **(6,954)** | **(6,718)** |

**Significant non-cash transactions**

There were no significant non-cash transactions in 2015 (2014: none), except for contingent consideration arrangements arising from business combinations (see Notes 5 and 29) and the Genentech property purchase option exercise (see Note 7).

# 29. Risk management

### Group risk management

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

### Financial risk management

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

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

### Credit risk

Credit risk arises from the possibility that counterparties to transactions may default on their obligations, causing financial losses for the Group. The objective of managing counterparty credit risk is to prevent losses of liquid funds deposited with or invested in such counterparties. The maximum exposure to credit risk resulting from financial activities, without considering netting agreements and without taking account of any collateral held or other credit enhancements, is equal to the carrying value of the Group's financial assets.

**Accounts receivable.** At 31 December 2015 the Group has trade receivables of CHF 9.0 billion (2014: CHF 9.7 billion). These are subject to a policy of active credit risk management which focuses on the assessment of country risk, credit availability, ongoing credit evaluation and account monitoring procedures. The objective of trade receivables management is to maximise the collection of unpaid amounts.

At 31 December 2015 the Group's combined trade receivables balance with three US national wholesale distributors, AmerisourceBergen Corp., McKesson Corp. and Cardinal Health, Inc., was equivalent to CHF 1.5 billion representing 17% of the Group's consolidated trade receivables (2014: CHF 1.9 billion representing 19%). There is no other significant concentration of counterparty credit risk due to the Group's large number of customers and their wide geographical spread. Risk limits and exposures are continuously monitored by country and by the nature of counterparties. The Group obtains credit insurance and similar enhancements when appropriate to protect the collection of trade receivables. At 31 December 2015 no collateral was held for trade receivables (2014: none).

Since 2010 there have been 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 CHF 1.0 billion (2014: CHF 1.2 billion) with the public and private customers in these countries. 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 nature and geographic location of counterparties to accounts receivable that are not overdue or impaired are shown in the table below. These include the balances with US national wholesalers and Southern Europe public customers described above.

**Accounts receivable (not overdue): nature and geographical location of counterparties** in millions of CHF

| | | | | 2015 | | | | 2014 |
|---|---|---|---|---|---|---|---|---|
| Regions | Total | Public | Whole-salers/ distributors | Private | Total | Public | Whole-salers/ distributors | Private |
| Switzerland | 37 | 14 | 10 | 13 | 39 | 15 | 11 | 13 |
| Europe | 1,670 | 616 | 340 | 714 | 1,802 | 710 | 410 | 682 |
| North America | 2,065 | 50 | 1,394 | 621 | 2,666 | 65 | 1,885 | 716 |
| Latin America | 475 | 75 | 159 | 241 | 617 | 106 | 177 | 334 |
| Japan | 1,128 | – | 1,124 | 4 | 1,136 | – | 1,133 | 3 |
| Asia, Australia and Oceania | 1,044 | 40 | 524 | 480 | 1,016 | 47 | 526 | 443 |
| Rest of the World | 766 | 138 | 324 | 304 | 705 | 57 | 242 | 406 |
| **Total** | **7,185** | **933** | **3,875** | **2,377** | **7,981** | **1,000** | **4,384** | **2,597** |

The ageing of accounts receivable that were not impaired is shown in the table below.

**Ageing of accounts receivable that are not impaired** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Neither overdue nor impaired | 7,185 | 7,981 |
| Overdue under 1 month | 374 | 281 |
| Overdue 1–3 months | 302 | 254 |
| Overdue 3–6 months | 269 | 279 |
| Overdue 6–12 months | 199 | 208 |
| Overdue more than 1 year | – | – |
| **Total accounts receivable** | **8,329** | **9,003** |

**Cash and marketable securities.** At 31 December 2015 the Group has cash and marketable securities of CHF 9.2 billion (2014: CHF 11.7 billion). These are subject to a policy of restricting exposures to high-quality counterparties and setting defined limits for individual counterparties. These limits and counterparty credit ratings are reviewed regularly. Investments in marketable securities are entered into on the basis of guidelines with regard to liquidity, quality and maximum amount. As a general rule, the Group invests only in high-quality securities with adequate liquidity. Cash and short-term time deposits are subject to rules which limit the Group's exposure to individual financial institutions.

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

| | 2015 (CHF m) | 2015 (% of total) | 2014 (CHF m) | 2014 (% of total) |
|---|---|---|---|---|
| AAA-range | 1,512 | 17 | 1,851 | 17 |
| AA-range | 1,768 | 19 | 3,227 | 29 |
| A-range | 5,364 | 59 | 5,604 | 50 |
| BBB-range | 226 | 2 | 129 | 1 |
| Below BBB-range | 50 | 1 | 4 | 0 |
| Unrated | 146 | 2 | 335 | 3 |
| **Total** | **9,066** | **100** | **11,150** | **100** |

**Master netting agreements.** The Group enters into derivative transactions and collateral agreements under International Swaps and Derivatives Association (ISDA) master netting agreements with the respective counterparties in order to mitigate counterparty risk. Under such agreements the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. The ISDA agreements do not meet the criteria for offsetting in the balance sheet as the Group does not have a currently enforceable right to offset recognised amounts, because the right to offset is only enforceable on the occurrence of future events, such as a default or other credit events.

**Contract terms.** At 31 December 2015 there are no significant financial assets whose terms have been renegotiated (2014: none).

**Impairment losses.** During 2015 total impairment losses for available-for-sale financial assets amounted to CHF 10 million (2014: CHF 9 million).

### 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. Roche and Chugai enjoy strong credit quality and are rated by at least one major credit rating agency. The ratings will permit efficient access to the international capital markets in the event of major financing requirements. At 31 December 2015 the Group has unused committed credit lines with various financial institutions totalling CHF 7.7 billion (2014: CHF 5.0 billion), of which CHF 7.4 billion serve as a back-stop line for the commercial paper program.

The remaining undiscounted cash flow contractual maturities of financial liabilities, including estimated interest payments, are shown in the table below.

**Contractual maturities of financial liabilities** in millions of CHF

| | Carrying value | Total | Less than 1 year | 1–2 years | 2–5 years | Over 5 years |
|---|---|---|---|---|---|---|
| **Year ended 31 December 2015** | | | | | | |
| Debt [20] | | | | | | |
| – Bonds and notes | 20,007 | 25,814 | 3,625 | 3,222 | 6,443 | 12,524 |
| – Other debt | 3,244 | 3,244 | 3,238 | 1 | 3 | 2 |
| Contingent consideration [19] | 1,492 | 1,682 | 319 | 408 | 697 | 258 |
| Accounts payable [16] | 3,207 | 3,207 | 3,207 | – | – | – |
| Derivative financial instruments [18] | 639 | 639 | 455 | 8 | 7 | 169 |
| **Total financial liabilities** | **28,589** | **34,586** | **10,844** | **3,639** | **7,150** | **12,953** |
| **Year ended 31 December 2014** | | | | | | |
| Debt [20] | | | | | | |
| – Bonds and notes | 21,589 | 29,042 | 3,318 | 3,338 | 10,166 | 12,220 |
| – Other debt | 4,125 | 4,125 | 3,945 | 38 | 122 | 20 |
| Contingent consideration [19] | 815 | 967 | 67 | 238 | 292 | 370 |
| Accounts payable [16] | 2,883 | 2,883 | 2,883 | – | – | – |
| Derivative financial instruments [18] | 673 | 673 | 494 | 145 | 34 | – |
| **Total financial liabilities** | **30,085** | **37,690** | **10,707** | **3,759** | **10,614** | **12,610** |

**Take-or-pay commitments.** The Group has entered into contract manufacturing agreements with various companies to further develop manufacturing capacity and flexibility. There are future minimum take-or-pay commitments within some of these agreements with a total potential commitment from the Group of CHF 1.0 billion at 31 December 2015. This is mainly related to a contract manufacturing agreement in the Pharmaceuticals Division that is in effect until 2024.

### Market risk

Market risk arises from changing market prices, mainly foreign exchange rates and interest rates, of the Group's financial assets or financial liabilities which affect the Group's financial result and equity.

**Value-at-Risk.** The Group uses Value-at-Risk (VaR) to measure the impact of market risk on its financial instruments. VaR 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. VaR is calculated using a historical simulation approach and for each scenario, all financial instruments are fully valued and the total change in value and earnings is determined. VaR calculations are based on a 95% confidence level and a holding period of 20 trading days over the past ten years. This holding period reflects the time required to change the corresponding risk exposure, should this be deemed appropriate.

Actual future gains and losses associated with our treasury activities may differ materially from the VaR analyses due to the inherent limitations associated with predicting the timing and amount of changes to interest rates, foreign exchange rates and equity investment prices, particularly in periods of high market volatilities. Furthermore, VaR does not include the effect of changes in credit spreads.

**Market risk of financial instruments** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| VaR – Interest rate component | 257 | 266 |
| VaR – Foreign exchange component | 35 | 32 |
| VaR – Other price component | 41 | 36 |
| Diversification | (47) | (56) |
| **VaR – Total market risk** | **286** | **278** |

The interest rate component remained largely stable. The foreign exchange component increased due to an unfavourable exposure mix. The other price component arises mainly from movements in equity security prices and increased due to the higher market value of some of the equity securities held by the Group.

### Foreign exchange risk

The Group uses the Swiss franc as its reporting currency and as a result is exposed to movements in foreign currencies, mainly the US dollar, Japanese yen and euro. The objective of the Group's foreign exchange risk management activities is to preserve the economic value of its current and future assets and to minimise the volatility of the Group's financial result. The primary focus of the Group's foreign exchange risk management activities is on hedging transaction exposures arising through foreign currency flows or monetary positions held in foreign currencies. The Group uses forward contracts, foreign exchange options and cross-currency swaps to hedge transaction exposures. Application of these instruments intends to continuously lock in favourable developments of foreign exchange rates, thereby reducing the exposure to potential future movements in such rates.

### Interest rate risk

The Group mainly raises debt on a fixed rate basis for bonds and notes. The Group is exposed to movements in interest rates, mainly for its US dollar, Swiss franc and euro floating rate financial instruments. The primary objective of the Group's interest rate management is to protect the net interest result. The Group may use forward contracts, options and swaps to hedge its interest rate exposures. Depending on the interest rate environment of major currencies, the Group will use these instruments to generate an appropriate mix of fixed and floating rate exposures.

### Other price risk

Other price risk arises mainly from movements in the prices of equity securities. The Group manages the price risk through placing limits on individual and total equity investments. These limits are defined both as a percentage of total liquid funds and as an absolute number for individual equity investments.

### Capital management

The Group defines the capital that it manages as the Group's total capitalisation, being the sum of debt plus equity, including non-controlling interests. The Group's objectives when managing capital are:
- To safeguard the Group's ability to continue as a going concern, so that it can continue to provide benefits for patients and returns to investors.
- To provide an adequate return to investors based on the level of risk undertaken.
- To have available the necessary financial resources to allow the Group to invest in areas that may deliver future benefits for patients and returns to investors.
- To maintain sufficient financial resources to mitigate against risks and unforeseen events.

The capitalisation is reported to senior management as part of the Group's regular internal management reporting and is shown in the table below.

**Capital** in millions of CHF

| | 2015 | 2014 | 2013 |
|---|---|---|---|
| Capital and reserves attributable to Roche shareholders [21] | 20,979 | 19,586 | 19,294 |
| Equity attributable to non-controlling interests [23] | 2,321 | 1,972 | 1,947 |
| **Total equity** | **23,300** | **21,558** | **21,241** |
| **Total debt** [20] | **23,251** | **25,714** | **18,643** |
| **Capitalisation** | **46,551** | **47,272** | **39,884** |

The Group's net equity was significantly impacted by the 2009 Genentech transaction (see Note 21).

The Group is not subject to regulatory capital adequacy requirements as known in the financial services industry. The Group has majority shareholdings in Chugai and Foundation Medicine (see Note 22). Chugai and Foundation Medicine are public companies and their objectives, policies and processes for managing their own capital are determined by local management.

**Financial instrument accounting classifications and fair values**

The fair values of financial assets and liabilities, together with the carrying value shown in the consolidated balance sheet are as follows:

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

| | Available-for-sale | Fair value – hedging instruments | Fair value – designated | Loans and receivables | Other financial liabilities | Total carrying value | Fair value |
|---|---|---|---|---|---|---|---|
| **Year ended 31 December 2015** | | | | | | | |
| Other non-current assets [14] | | | | | | | |
| – Available-for-sale investments | 309 | – | – | – | – | 309 | 309 |
| – Other financial non-current assets | – | – | – | 105 | – | 105 | 105 |
| Accounts receivable [11] | – | – | – | 8,329 | – | 8,329 | 8,329 |
| Marketable securities [12] | 5,440 | – | – | – | – | 5,440 | 5,440 |
| Cash and cash equivalents [13] | – | – | – | 3,731 | – | 3,731 | 3,731 |
| Other current assets [15] | | | | | | | |
| – Derivative financial instruments | – | 169 | – | – | – | 169 | 169 |
| – Other financial current assets | – | – | – | 1,359 | – | 1,359 | 1,359 |
| **Total financial assets** | **5,749** | **169** | **–** | **13,524** | **–** | **19,442** | **19,442** |
| Debt [20] | | | | | | | |
| – Bonds and notes | – | – | – | – | (20,007) | (20,007) | (21,516) |
| – Other debt | – | – | – | – | (3,244) | (3,244) | (3,244) |
| Contingent consideration [19] | – | – | (1,492) | – | – | (1,492) | (1,492) |
| Accounts payable [16] | – | – | – | – | (3,207) | (3,207) | (3,207) |
| Derivative financial instruments [18] | – | (639) | – | – | – | (639) | (639) |
| **Total financial liabilities** | **–** | **(639)** | **(1,492)** | **–** | **(26,458)** | **(28,589)** | **(30,098)** |
| **Year ended 31 December 2014** | | | | | | | |
| Other non-current assets [14] | | | | | | | |
| – Available-for-sale investments | 246 | – | – | – | – | 246 | 246 |
| – Other financial non-current assets | – | – | – | 146 | – | 146 | 146 |
| Accounts receivable [11] | – | – | – | 9,003 | – | 9,003 | 9,003 |
| Marketable securities [12] | 7,961 | – | – | – | – | 7,961 | 7,961 |
| Cash and cash equivalents [13] | – | – | – | 3,742 | – | 3,742 | 3,742 |
| Other current assets [15] | | | | | | | |
| – Derivative financial instruments | – | 194 | – | – | – | 194 | 194 |
| – Other financial current assets | – | – | – | 1,163 | – | 1,163 | 1,163 |
| **Total financial assets** | **8,207** | **194** | **–** | **14,054** | **–** | **22,455** | **22,455** |
| Debt [20] | | | | | | | |
| – Bonds and notes | – | – | – | – | (21,589) | (21,589) | (24,256) |
| – Other debt | – | – | – | – | (4,125) | (4,125) | (4,125) |
| Contingent consideration [19] | – | – | (815) | – | – | (815) | (815) |
| Accounts payable [16] | – | – | – | – | (2,883) | (2,883) | (2,883) |
| Derivative financial instruments [18] | – | (673) | – | – | – | (673) | (673) |
| **Total financial liabilities** | **–** | **(673)** | **(815)** | **–** | **(28,597)** | **(30,085)** | **(32,752)** |

The fair value of bonds and notes is Level 1 and is calculated based on the observable market prices of the debt instruments or the present value of the future cash flows on the instrument, discounted at a market rate of interest for instruments with similar credit status, cash flows and maturity periods.

**Fair value hierarchy**

The table below analyses financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:
- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 – observable inputs other than quoted prices in active markets for identical assets and liabilities.
- Level 3 – unobservable inputs.

Fair value hierarchy of financial instruments in millions of CHF

| | Level 1 | Level 2 | Level 3 | Total |
|---|---|---|---|---|
| **Year ended 31 December 2015** | | | | |
| Marketable securities | | | | |
| – Equity securities | 105 | – | – | 105 |
| – Debt securities | 1,370 | 20 | – | 1,390 |
| – Money market instruments and time accounts over three months | 796 | 3,149 | – | 3,945 |
| Derivative financial instruments | – | 169 | – | 169 |
| Available-for-sale investments – held at fair value [14] | 61 | 158 | – | 219 |
| **Financial assets recognised at fair value** | **2,332** | **3,496** | **–** | **5,828** |
| Derivative financial instruments | – | (639) | – | (639) |
| Contingent consideration | – | – | (1,492) | (1,492) |
| **Financial liabilities recognised at fair value** | **–** | **(639)** | **(1,492)** | **(2,131)** |
| **Year ended 31 December 2014** | | | | |
| Marketable securities | | | | |
| – Equity securities | 553 | – | – | 553 |
| – Debt securities | 1,267 | 2 | – | 1,269 |
| – Money market instruments and time accounts over three months | 1,863 | 4,276 | – | 6,139 |
| Derivative financial instruments | – | 194 | – | 194 |
| Available-for-sale investments – held at fair value [14] | 43 | 134 | – | 177 |
| **Financial assets recognised at fair value** | **3,726** | **4,606** | **–** | **8,332** |
| Derivative financial instruments | – | (673) | – | (673) |
| Contingent consideration | – | – | (815) | (815) |
| **Financial liabilities recognised at fair value** | **–** | **(673)** | **(815)** | **(1,488)** |

Level 1 financial assets consist of treasury bills, bonds and quoted shares. Level 2 financial assets consist primarily of commercial paper, certificates of deposit and derivative financial instruments.

The Group determines Level 2 fair values using the following valuation techniques:
- Marketable securities and derivative financial instruments are based on valuation models that use observable market data for interest rates, yield curves, foreign exchange rates and implied volatilities for similar instruments at the measurement date.
- Available-for-sale investments using a valuation model derived from the most recently published observable financial prices.

The Group recognises transfers between levels of the fair value hierarchy as of the end of the reporting period during which the transfer has occurred. There were no significant transfers between Level 1 and Level 2 and vice versa during the year (2014: none).

## Level 3 fair values

Details of the determination of Level 3 fair value measurements and the transfer out of Level 3 of the fair value hierarchy are set out below.

**Contingent consideration arrangements** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| At 1 January | (815) | (122) |
| Arising from business combinations [5] | (567) | (721) |
| Acquired with business combinations | – | (18) |
| Utilised [5] | 119 | 99 |
| Total unrealised gains and losses included in the income statement | | |
| – Unused amounts reversed | 47 | 2 |
| – Additional amount created | (239) | – |
| – Discount unwind | (40) | (9) |
| Total gains and losses included in other comprehensive income | | |
| – Currency translation effects | 3 | (46) |
| **At 31 December** | **(1,492)** | **(815)** |

## Contingent consideration arrangements

The Group is party to certain contingent consideration arrangements arising from business combinations. The fair values are determined considering the expected payments, discounted to present value using risk-adjusted average discount rate of 3.9% (2014: 4.1%).
The expected payments are determined by considering the possible scenarios of forecast sales and other performance criteria, the amount to be paid under each scenario, and the probability of each scenario. The significant unobservable inputs are the forecast sales, other performance criteria and the risk-adjusted discount rate. The estimated fair value would increase if the forecast sales or other performance criteria rate was higher or the risk-adjusted discount rate was lower. At 31 December 2015 the total potential payments under contingent consideration arrangements could be up to CHF 2.9 billion (2014: CHF 2.2 billion) as follows:

**Potential payments under contingent consideration arrangements** in millions of CHF

| Acquisition | Year acquired | Operating segment | 2015 | 2014 |
|---|---|---|---|---|
| Seragon | 2014 | Roche Pharmaceuticals | 964 | 966 |
| Trophos | 2015 | Roche Pharmaceuticals | 378 | – |
| Dutalys | 2014 | Roche Pharmaceuticals | 351 | 351 |
| Santaris | 2014 | Roche Pharmaceuticals | 196 | 197 |
| GeneWeave | 2015 | Diagnostics | 232 | – |
| Genia | 2014 | Diagnostics | 222 | 223 |
| Ariosa | 2015 | Diagnostics | 198 | – |
| CMI | 2013 | Diagnostics | 178 | 228 |
| IQuum | 2014 | Diagnostics | 40 | 134 |
| Others | – | Diagnostics | 149 | 104 |
| **At 31 December** | | | **2,908** | **2,203** |

## Derivative financial instruments

The Group has entered into various currency swaps for certain non-US dollar debt instruments. Cash collateral agreements were entered into with the counterparties to the currency swaps to mitigate counterparty risk. The following table sets out the carrying value of derivative financial instruments and the amounts that are subject to master netting agreements.

**Derivative financial instruments** in millions of CHF

| | Assets 2015 | 2014 | 2013 | Liabilities 2015 | 2014 | 2013 |
|---|---|---|---|---|---|---|
| Foreign currency derivatives | | | | | | |
| – Forward exchange contracts | 134 | 99 | 138 | (71) | (110) | (25) |
| – Cross-currency swaps | – | 76 | 513 | (561) | (145) | – |
| – Other | – | – | – | – | – | – |
| Interest rate derivatives | | | | | | |
| – Swaps | 35 | 19 | 2 | (7) | (34) | (59) |
| – Other | – | – | – | – | – | – |
| Other derivatives | – | – | – | – | (384) | (270) |
| **Carrying value of derivative financial instruments[15, 18]** | **169** | **194** | **653** | **(639)** | **(673)** | **(354)** |
| Derivatives subject to master netting agreements | (54) | (72) | (55) | 54 | 72 | 55 |
| Collateral arrangements | (42) | (99) | (486) | 496 | 175 | 6 |
| **Net amount** | **73** | **23** | **112** | **(89)** | **(426)** | **(293)** |

**Collateral arrangements**

The fair value of the currency swaps decreased during 2015, mainly due to a weaker euro compared to the US dollar, and as a result cash was delivered by the Group to the counterparties.

**Movements in cash collateral other receivable (accrued liability)** in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| At 1 January | 76 | (480) |
| Net cash delivered by (to) the Group | 378 | 556 |
| **At 31 December** | **454** | **76** |

**Hedge accounting**

At 31 December 2015 the Group has the following cash flow hedges and fair value hedges which are designated in a qualifying hedge relationship.

**Cash flow hedges.** The Group has entered into cross-currency swaps to hedge foreign exchange and interest rate risk on some of the bonds and notes issued by the Group which are denominated in euro and pound sterling. At 31 December 2015 such instruments are recorded as a net fair value liability of CHF 561 million (2014: CHF 69 million). There was no ineffective portion.

Chugai has entered into foreign exchange forward contracts to hedge a part of its foreign translation exposure to Swiss franc and US dollar. At 31 December 2015 such instruments are recorded as fair value liabilities of CHF 20 million (2014: CHF 14 million). There was no ineffective portion.

The expected undiscounted cash flows from qualifying cash flow hedges, including interest payments during the duration of the derivative contract and final settlement on maturity, are shown in the table below.

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

| | 2015 Total | Less than 1 year | More than 1 year | 2014 Total | Less than 1 year | More than 1 year |
|---|---|---|---|---|---|---|
| Cash inflows | 5,789 | 3,807 | 1,982 | 5,396 | 723 | 4,673 |
| Cash outflows | (6,588) | (4,272) | (2,316) | (5,708) | (725) | (4,983) |
| **Total cash inflow (outflow)** | **(799)** | **(465)** | **(334)** | **(312)** | **(2)** | **(310)** |

The undiscounted cash flows in the table above will affect profit and loss as shown below. These include interest payments during the duration of the derivative contract but do not include the final settlement on maturity.

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

| | 2015 Total | 2015 Less than 1 year | 2015 More than 1 year | 2014 Total | 2014 Less than 1 year | 2014 More than 1 year |
|---|---|---|---|---|---|---|
| Cash inflows | 633 | 212 | 421 | 966 | 261 | 705 |
| Cash outflows | (806) | (275) | (531) | (1,108) | (301) | (807) |
| **Total cash inflow (outflow)** | **(173)** | **(63)** | **(110)** | **(142)** | **(40)** | **(102)** |

The changes in the hedging reserve within equity are shown in Note 21.

**Fair value hedges.** The Group has entered into some interest rate swaps to hedge some of its fixed-term debt instruments. At 31 December 2015 such instruments are recorded as fair value liabilities of CHF 6 million (2014: CHF 34 million) and fair value assets of CHF 35 million (2014: CHF 19 million). During 2015 a gain of CHF 44 million was recorded on these interest rate swaps (2014: gain of CHF 42 million). As the fair value hedge had been highly effective since inception, the result of the interest rate swaps was largely offset by changes in the fair value of the hedged debt instruments.

At 31 December 2014 the Group had forward contracts to manage the risk of market fluctuations for equity investments in various biotechnology companies. The forward contracts were recorded as fair value liabilities of CHF 384 million at 31 December 2014. During 2015 the hedged equity investments were sold and all of the forward contracts were settled. This resulted in a loss on the forward contracts of CHF 354 million (2014: loss of CHF 114 million). The loss on the forward contracts was more than offset by the gain on sale of the hedged equity investments and was recorded in net gains on sale of equity securities (see Note 3).

**Net investment hedges.** The Group does not have any net investment hedges.

# 30. Related parties

**Controlling shareholders**

The share capital of Roche Holding Ltd, which is the Group's parent company, consists of 160,000,000 bearer shares.

At 31 December 2015 and 2014, based on information supplied to the Group, a shareholder group with pooled voting rights owned 72,018,000 shares, which represented 45.01% of the issued shares. This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Mr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder pooling agreement has existed since 1948. The figures above do not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, now holds 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

Mr André Hoffmann and Dr Andreas Oeri are members of the Board of Directors of Roche Holding Ltd. Mr Hoffmann received remuneration totalling CHF 424,065 (2014: CHF 418,298) and Dr Oeri received remuneration totalling CHF 360,000 (2014: CHF 360,000).

There were no other transactions between the Group and the individual members of the above shareholder group with the exception of Mr Jörg Duschmalé who works as a post-doc at Roche.

**Subsidiaries and associates**

A listing of the major Group subsidiaries and associates is included in Note 31. Transactions between the parent company and its subsidiaries and between subsidiaries are eliminated on consolidation. There were no significant transactions between the Group and its associates.

### Key management personnel

Total remuneration of key management personnel was CHF 55 million (2014: CHF 56 million).

Members of the Board of Directors of Roche Holding Ltd receive an annual remuneration and payment for their time and expenses related to their membership of Board committees. Dr Franz and members of the Corporate Executive Committee of Roche Holding Ltd receive remuneration, which consists of an annual salary, bonus and an expense allowance. The Group pays social insurance contributions in respect of the above remuneration and pays contributions to pension and other post-employment benefit plans for the Chairman of the Board of Directors and members of the Corporate Executive Committee. The members of the Corporate Executive Committee also participate in certain equity compensation plans as described below. The terms, vesting conditions and fair value of these awards are disclosed in Note 26. New members of the Corporate Executive Committee are included in the table below for the full calendar year in which they joined the CEC. Similarly, members of the Corporate Executive Committee retiring part way through the year are included for the full calendar year in which they left the CEC.

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

| | 2015 | 2014 |
|---|---|---|
| Salaries, including cash-settled bonus | 25 | 26 |
| Bonus Stock Awards | 7 | 8 |
| Social security costs | 4 | 5 |
| Pensions and other post-employment benefits | 3 | 2 |
| Equity compensation plans | 12 | 11 |
| Board fees | 3 | 3 |
| Other employee benefits | 1 | 1 |
| **Total** | **55** | **56** |

For the purposes of these remuneration disclosures the values for equity compensation plans, including the Bonus Stock Awards, are calculated based on the fair value used in Note 26. These represent the cost to the Group of such awards at grant date and reflect, amongst other matters, the observed exercise behaviour and exit rate for the whole population that receive the awards and initial simulations of any performance conditions.

The detailed disclosures regarding executive remuneration that are required by Swiss law are included in the Remuneration Report included in the Annual Report on pages 156 to 191. In those disclosures the values for equity compensation plans, including the Bonus Stock Awards, represent the fair value that the employee receives taking into account the preliminary assessment of any completed performance conditions. These fair values are shown in the table below, which reconciles those disclosures required by Swiss law to the above related party disclosures for key management personnel.

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

| | 2015 | 2014 |
|---|---|---|
| Total remuneration of the members of the Board of Directors and Corporate Executive Committee (IFRS basis – see table above) | 55 | 56 |
| Deduct | | |
| – Bonus Stock Awards (IFRS basis) | (7) | (8) |
| – Equity compensation plans (IFRS basis) | (12) | (11) |
| Add back | | |
| – Bonus Stock Awards (Swiss legal basis) | 4 | 4 |
| – Equity compensation plans (Swiss legal basis) | 14 | 18 |
| **Total remuneration of the members of the Board of Directors and Corporate Executive Committee (Swiss legal basis)** | **54** | **59** |
| Of which (including social security costs) | | |
| Board of Directors (page 173 of the Annual Report) | 9 | 13 |
| Corporate Executive Committee (pages 185–186 of the Annual Report) | 45 | 46 |

**Bonus Stock Awards.** The Chairman of the Board of Directors and the Chief Executive Officer will be granted Bonus Stock Awards in lieu of their cash-settled bonus for the financial year 2015. These will be issued by the end of April 2016. The number of awards and fair value per award will be calculated at the grant date.

**Equity compensation plans.** The members of the Corporate Executive Committee received equity compensation as shown in the following tables.

Number of rights, options and awards granted to members of the Corporate Executive Committee

| | 2015 | 2014 |
|---|---|---|
| Roche Stock-settled Stock Appreciation Rights | 172,515 | 156,567 |
| Roche Restricted Stock Unit Plan | 15,712 | 15,957 |
| Roche Performance Share Plan | 14,005 | 15,291 |

Contributions paid for members of the Corporate Executive Committee in millions of CHF

| | 2015 | 2014 |
|---|---|---|
| Roche Connect | 0.2 | 0.3 |

**Transactions with former members of the Board of Directors and Corporate Executive Committee.** Pensions totalling CHF 2 million were paid by the Group to former Corporate Executive Committee members (2014: CHF 2 million). In 2014, subsequent to his retirement as a member of the Board of Directors, Dr Humer received CHF 3 million in his advisory capacity to the Chairman of the Board.

### Defined benefit plans

Transactions between the Group and the various defined benefit plans for the employees of the Group are described in Note 25.

# 31. Subsidiaries and associates

## Listed companies

| Country | Company | City | Share capital (in millions) | | Equity interest (in %) |
|---|---|---|---|---|---|
| Switzerland | Roche Holding Ltd | Basel | CHF | 160.0 | |
| | Stock Exchange: SIX Swiss Exchange Zurich | | | | |
| | Valor Share: 1203211 | | | | |
| | Valor *Genussschein:* 1203204 | | | | |
| | ISIN Share: CH0012032113 | | | | |
| | ISIN *Genussschein:* CH0012032048 | | | | |
| | Market capitalisation: CHF 235,554.4 m | | | | |
| Japan | Chugai Pharmaceutical Co., Ltd. | Tokyo | JPY | 335.2 | 61.4 |
| | Stock Exchange: Tokyo | | | | |
| | ISIN: JP3519400000 | | | | |
| | Market capitalisation: JPY 2,315,227 m | | | | |
| United States | Foundation Medicine, Inc. | Cambridge | USD | 34.5 | 61.1 |
| | Stock Exchange: Nasdaq | | | | |
| | Stock Code: FMI | | | | |
| | Market capitalisation: USD 727.06 m | | | | |

## Non-listed companies

| Country | Company | City | Share capital (in millions) | | Equity interest (in %) |
|---|---|---|---|---|---|
| Algeria | Roche Algérie S.p.A. | Hydra | DZD | 1.0 | 47 |
| Argentina | Productos Roche S.A. Química e Industrial | Tigre | ARS | 313.5 | 100 |
| | Vanguardia en productos farmacéuticos (VANPROFARMA) S.A. | Buenos Aires | ARS | 7.6 | 100 |
| Australia | Roche Diabetes Care Australia Pty Limited | Bella Vista | AUD | (–) | 100 |
| | Roche Diagnostics Australia Pty. Limited | Castle Hill | AUD | 5.0 | 100 |
| | Roche Products Pty. Limited | Dee Why | AUD | 65.0 | 100 |
| Austria | Dutalys GmbH | Vienna | EUR | (–) | 100 |
| | Roche Austria GmbH | Vienna | EUR | 14.5 | 100 |
| | Roche Diabetes Care Austria GmbH | Vienna | EUR | (–) | 100 |
| | Roche Diagnostics GmbH | Vienna | EUR | 1.1 | 100 |
| Azerbaijan | Roche Azerbaijan LLC | Baku | AZN | 0.5 | 100 |
| Bangladesh | Roche Bangladesh Limited | Dhaka | BDT | 27.2 | 100 |
| Belarus | FLLC 'Roche Products Limited' | Minsk | BYR | 1.5 | 100 |
| Belgium | N.V. Roche S.A. | Brussels | EUR | 32.0 | 100 |
| | Roche Diagnostics Belgium NV | Brussels | EUR | 3.8 | 100 |
| Bermuda | Chemical Manufacturing and Trading Company Limited | Hamilton | USD | (–) | 100 |
| | Hoffmann-La Roche Products Limited | Hamilton | USD | (–) | 100 |
| | Roche Capital Services Ltd. | Hamilton | RUB | (–) | 100 |
| | Roche Catalyst Investments Ltd. | Hamilton | USD | (–) | 100 |
| | Roche Financial Investments Ltd. | Hamilton | USD | (–) | 100 |
| | Roche Financial Management Ltd. | Hamilton | USD | (–) | 100 |
| | Roche Financial Services Ltd. | Hamilton | USD | (–) | 100 |
| | Roche International Ltd. | Hamilton | USD | (–) | 100 |
| | Roche Intertrade Limited | Hamilton | USD | 10.0 | 100 |
| | Roche Operations Ltd. | Hamilton | USD | (–) | 100 |
| | Roche Services Holdings Ltd. | Hamilton | USD | (–) | 100 |
| | Syntex Pharmaceuticals International Ltd. | Hamilton | USD | (–) | 100 |
| Bosnia-Herzegovina | Roche Ltd. Pharmaceutical Company | Sarajevo | BAM | 13.1 | 100 |
| Brazil | Produtos Roche Químicos e Farmacêuticos S.A. | São Paulo | BRL | 41.7 | 100 |
| | Roche Diagnostica Brasil Ltda. | São Paulo | BRL | 459.3 | 100 |
| Bulgaria | Roche Bulgaria EOOD | Sofia | BGN | 5.1 | 100 |
| Cameroon | Roche Cameroun SARL | Douala | XAF | 60.0 | 100 |
| Canada | Chempharm Limited | Toronto | CAD | (–) | 100 |
| | Hoffmann-La Roche Limited | Toronto | CAD | 40.3 | 100 |
| | Sapac Corporation Ltd. | St. John | CAD | (–) | 100 |
| Chile | Roche Chile Limitada | Santiago de Chile | CLP | 70.9 | 100 |
| China | Roche (China) Holding Ltd. | Shanghai | USD | 37.3 | 100 |
| | Roche Diagnostics (Hong Kong) Limited | Hong Kong | HKD | 10.0 | 100 |
| | Roche Diagnostics (Shanghai) Limited | Shanghai | USD | 31.0 | 100 |
| | Roche Diagnostics (Suzhou) Limited | Suzhou | CNY | 100.0 | 100 |
| | Roche Hong Kong Limited | Hong Kong | HKD | 10.0 | 100 |
| | Roche R&D Center (China) Ltd. | Shanghai | USD | 6.3 | 100 |
| | Shanghai Roche Pharmaceuticals Limited | Shanghai | USD | 278.7 | 70 |

| Country | Company | City | | Share capital (in millions) | Equity interest (in %) |
|---|---|---|---|---|---|
| Colombia | Productos Roche S.A. | Bogotá | COP | 26,923.7 | 100 |
| Costa Rica | Roche Servicios S.A. | Heredia | USD | 8.1 | 100 |
| Côte d'Ivoire | Roche Côte d'Ivoire SARL | Abidjan | XOF | 50.0 | 100 |
| Croatia | Roche d.o.o. | Zagreb | HRK | 4.8 | 100 |
| Czech Republic | Roche s.r.o. | Prague | CZK | 200.0 | 100 |
| Denmark | Roche a/s, Medicinalvarer og Kemikalier | Hvidovre | DKK | 4.0 | 100 |
| | Roche Diagnostics a/s | Hvidovre | DKK | 1.3 | 100 |
| | Roche Innovation Center Copenhagen A/S | Hoersholm | DKK | 100.1 | 100 |
| Dominican Republic | Productos Roche Dominicana S.A. | Santo Domingo | DOP | 0.6 | 100 |
| Ecuador | Roche Ecuador S.A. | Quito | USD | 28.1 | 100 |
| Egypt | Roche Egypt for Manufacturing and Trading SAE | Cairo | EGP | 10.0 | 100 |
| | Roche Egypt LLC | Cairo | EGP | 0.1 | 95 |
| | RoDiagnostics Egypt for Trading S.A.E | Giza | EGP | 0.3 | 100 |
| El Salvador | Productos Roche (El Salvador) S.A. | San Salvador | SVC | 0.2 | 100 |
| Estonia | Roche Eesti OÜ | Tallinn | EUR | 0.1 | 100 |
| Finland | Roche Diagnostics Oy | Espoo | EUR | 0.2 | 100 |
| | Roche Oy | Espoo | EUR | (–) | 100 |
| France | Institut Roche SAS | Boulogne-Billancourt | EUR | (–) | 100 |
| | Roche Diabetes Care France SAS | Meylan | EUR | 4.5 | 100 |
| | Roche Diagnostics France S.A.S. | Meylan | EUR | 16.0 | 100 |
| | Roche S.A.S. | Boulogne-Billancourt | EUR | 38.2 | 100 |
| | Trophos S.A. | Marseille | EUR | 1.9 | 100 |
| | Ventana Medical Systems S.A.S. | Illkirch | EUR | 0.9 | 100 |
| Georgia | Roche Georgia LLC | Tbilisi | GEL | 0.5 | 100 |
| Germany | Ascur Versicherungsvermittlungs GmbH | Grenzach-Wyhlen | EUR | (–) | 100 |
| | Galenus Mannheim Pharma GmbH | Mannheim | EUR | (–) | 100 |
| | Roche Beteiligungs GmbH | Grenzach-Wyhlen | EUR | 3.6 | 100 |
| | Roche Deutschland Holding GmbH | Grenzach-Wyhlen | EUR | 6.0 | 100 |
| | Roche Diabetes Care GmbH | Mannheim | EUR | (–) | 100 |
| | Roche Diagnostics Deutschland GmbH | Mannheim | EUR | 1.0 | 100 |
| | Roche Diagnostics GmbH | Mannheim | EUR | 94.6 | 100 |
| | Roche mtm laboratories AG | Mannheim | EUR | 1.4 | 100 |
| | Roche Pharma AG | Grenzach-Wyhlen | EUR | 61.4 | 100 |
| | Roche PVT GmbH | Waiblingen | EUR | (–) | 100 |
| | Roche Real Estate Services Mannheim GmbH | Mannheim | EUR | 1.8 | 100 |
| | Signature Diagnostics GmbH | Potsdam | EUR | 0.1 | 100 |
| | Swisslab GmbH | Berlin | EUR | (–) | 100 |
| | Verum Diagnostica GmbH | Munich | EUR | (–) | 100 |
| Ghana | Roche Products Ghana Limited | Accra | GHS | 1.2 | 100 |
| Greece | Roche (Hellas) S.A. | Athens | EUR | 80.1 | 100 |
| | Roche Diagnostics (Hellas) S.A. | Athens | EUR | 48.7 | 100 |
| Guatemala | Productos Roche Guatemala S.A. | Guatemala | GTQ | 0.6 | 100 |
| Honduras | Productos Roche (Honduras), S.A. | Tegucigalpa | HNL | (–) | 100 |
| Hungary | Roche (Hungary) Ltd. | Budapest | HUF | 30.0 | 100 |
| | Roche Services (Europe) Ltd. | Budapest | HUF | 3.0 | 100 |
| India | Roche Diagnostics (India) Pvt. Ltd. | Mumbai | INR | 149.2 | 100 |
| | Roche Products (India) Pvt. Ltd. | Mumbai | INR | 1,000.0 | 100 |
| Indonesia | P.T. Roche Indonesia | Jakarta | IDR | 1,323.0 | 98.6 |
| Iran | Roche Pars Co. (Ltd.) | Tehran | IRR | 41,610.0 | 100 |
| Ireland | Roche Ireland Limited | Clarecastle | EUR | 2.4 | 100 |
| | Roche Products (Ireland) Limited | Dublin | EUR | (–) | 100 |
| Israel | Medingo Ltd. | Yoqneam Illit | ILS | 8.0 | 100 |
| | Roche Pharmaceuticals (Israel) Ltd. | Petach Tikva | ILS | (–) | 100 |
| Italy | Roche Diagnostics S.p.A. | Monza | EUR | 18.1 | 100 |
| | Roche S.p.A. | Monza | EUR | 34.1 | 100 |
| Japan | Roche Diagnostics K.K. | Tokyo | JPY | 25,000.0 | 100 |
| Jordan | F. Hoffmann-La Roche Ltd / Jordan P.S.C. | Amman | JOD | (–) | 100 |
| Kazakhstan | Roche Kazakhstan LLP | Almaty | KZT | 150.0 | 100 |
| Kenya | Roche Kenya Limited | Nairobi | KES | 40.0 | 100 |
| Latvia | Roche Latvija SIA | Riga | EUR | 0.3 | 100 |
| Lebanon | Roche Lebanon SARL | Beirut | LBP | 100.0 | 100 |
| Lithuania | UAB Roche Lietuva | Vilnius | LTL | 0.8 | 100 |
| Macedonia | Roche Makedonija DOOEL | Skopje | MKD | 0.3 | 100 |
| Malaysia | Roche (Malaysia) Sdn. Bhd. | Kuala Lumpur | MYR | 4.0 | 100 |
| | Roche Diagnostics (Malaysia) Sdn. Bhd. | Petaling Jaya | MYR | 0.9 | 100 |
| | Syntex Pharmaceuticals Sdn. Bhd. | Kuala Lumpur | MYR | (–) | 100 |
| Mauritius | Roche Products (Mauritius) Limited | Quatre Bornes | MUR | 4.0 | 100 |
| Mexico | Productos Roche, S.A. de C.V. | Mexico City | MXN | 82.6 | 100 |
| | Roche Servicios de México, S.A. de C.V. | Mexico City | MXN | 3.5 | 100 |

| Country | Company | City | | Share capital (in millions) | Equity interest (in %) |
|---|---|---|---|---|---|
| Moldova | Roche Products Limited S.R.L. | Chisinau | MDL | 1.8 | 100 |
| Morocco | Roche S.A. | Casablanca | MAD | 59.5 | 100 |
| Myanmar | Roche Myanmar Company Limited | Yangon | USD | (–) | 100 |
| Netherlands | Kapa Biosystems B.V. | Amsterdam | USD | (–) | 100 |
| | Roche Diabetes Care Nederland B.V. | Almere | EUR | (–) | 100 |
| | Roche Diagnostics Nederland B.V. | Almere | EUR | 2.3 | 100 |
| | Roche Finance Europe B.V. | Woerden | EUR | 2.0 | 100 |
| | Roche Nederland B.V. | Woerden | EUR | 10.9 | 100 |
| | Roche Pharmholding B.V. | Woerden | EUR | 467.9 | 100 |
| New Zealand | Roche Diagnostics NZ Limited | Auckland | NZD | 3.0 | 100 |
| | Roche Products (New Zealand) Limited | Auckland | NZD | 13.5 | 100 |
| Nicaragua | Productos Roche (Nicaragua) S.A. | Managua | NIO | (–) | 100 |
| Nigeria | Roche Products Limited | Lagos | NGN | 200.0 | 100 |
| Norway | Roche Diagnostics Norge A/S | Oslo | NOK | 5.8 | 100 |
| | Roche Norge A/S | Oslo | NOK | 6.2 | 100 |
| Pakistan | Roche Pakistan Limited | Karachi | PKR | 38.3 | 100 |
| Palestine | Roche Pharmaceuticals Palestine Ltd | Ramallah and Al-Bireh | USD | 1.2 | 100 |
| Panama | Productos Roche (Panamá) S.A. | Panama City | PAB | (–) | 100 |
| | Productos Roche Interamericana S.A. | Panama City | USD | 0.1 | 100 |
| Peru | Productos Roche Química Farmacéutica S.A. | Lima | PEN | 11.1 | 100 |
| | Roche Farma (PERU) S.A. | Lima | PEN | 10.8 | 100 |
| Philippines | Roche (Philippines) Inc. | Taguig City | PHP | 300.0 | 100 |
| Poland | Roche Diabetes Care Polska sp. z o.o. | Warsaw | PLN | 2.0 | 100 |
| | Roche Diagnostics Polska Sp. z o.o. | Warsaw | PLN | 8.0 | 100 |
| | Roche Polska Sp. z o.o. | Warsaw | PLN | 25.0 | 100 |
| Portugal | Roche Farmacêutica Química, Lda. | Amadora | EUR | 1.1 | 100 |
| | Roche Sistemas de Diagnósticos, Sociedade Unipessoal, Lda. | Amadora | EUR | 2.6 | 100 |
| Puerto Rico | Roche Operations Ltd. | Ponce | USD | (–) | 100 |
| | Roche Products Inc. | Ponce | USD | 0.5 | 100 |
| | Syntex Puerto Rico Inc. | Ponce | USD | (–) | 100 |
| Romania | Roche Romania S.R.L. | Bucharest | RON | 472.2 | 100 |
| Russian Federation | Limited Liability Company Roche Diagnostics Rus | Moscow | RUB | 250.0 | 100 |
| | Roche – Moscow Ltd. | Moscow | RUB | 2.6 | 100 |
| Serbia | Roche d.o.o. Beograd | Belgrade | EUR | 9.6 | 100 |
| Singapore | Roche Diagnostics Asia Pacific Pte. Ltd. | Singapore | SGD | 20.4 | 100 |
| | Roche Singapore Pte. Ltd. | Singapore | SGD | 4.0 | 100 |
| | Roche Singapore Technical Operations, Pte. Ltd. | Singapore | USD | 35.0 | 100 |
| Slovakia | Roche Slovensko, S.R.O. | Bratislava | EUR | 0.3 | 100 |
| Slovenia | Roche farmacevtska druzba d.o.o. | Ljubljana | EUR | 0.2 | 100 |
| South Africa | Kapa Biosystems, (Pty) LTD | Cape Town | ZAR | (–) | 100 |
| | Roche Products (Proprietary) Limited | Illovo | ZAR | 60.0 | 100 |
| South Korea | Roche Diagnostics Korea Co., Ltd. | Seoul | KRW | 22,969.0 | 100 |
| | Roche Korea Company Ltd. | Seoul | KRW | 13,375.0 | 100 |
| Spain | Andreu Roche S.A. | Madrid | EUR | (–) | 100 |
| | Roche Diabetes Care Spain, S.L. | Barcelona | EUR | 1.0 | 100 |
| | Roche Diagnostics S.L. | Barcelona | EUR | 18.0 | 100 |
| | Roche Farma S.A. | Madrid | EUR | 45.0 | 100 |
| Sri Lanka | Roche Products Colombo (Private) Limited | Colombo | LKR | 14.0 | 100 |
| Sweden | Roche AB | Stockholm | SEK | 20.0 | 100 |
| | Roche Diagnostics Scandinavia AB | Bromma | SEK | 9.0 | 100 |
| Switzerland | Biopharm AG | Basel | CHF | (–) | 100 |
| | F. Hoffmann-La Roche Ltd | Basel | CHF | 150.0 | 100 |
| | Hoffmann-La Roche Ltd | Basel | CHF | 0.5 | 100 |
| | InterMune International AG | Basel | CHF | 0.1 | 100 |
| | Museum Tinguely AG | Basel | CHF | 0.1 | 100 |
| | Phaor AG | Basel | CHF | 0.1 | 100 |
| | Rabbit-Air Ltd | Bachenbülach | CHF | 3.0 | 100 |
| | Roche Capital Market Ltd | Basel | CHF | 1.0 | 100 |
| | Roche Chemische Unternehmungen AG | Basel | CHF | 1.2 | 100 |
| | Roche Diabetes Care Ltd. | Rotkreuz | CHF | 0.9 | 100 |
| | Roche Diagnostics (Switzerland) Ltd | Rotkreuz | CHF | 1.0 | 100 |
| | Roche Diagnostics International Ltd | Rotkreuz | CHF | 20.0 | 100 |
| | Roche Finance Ltd | Basel | CHF | 409.2 | 100 |
| | Roche Forum Buonas Ltd | Buonas | CHF | 0.1 | 100 |
| | Roche Glycart Ltd | Schlieren | CHF | 0.3 | 100 |
| | Roche Long Term Foundation | Basel | CHF | 0.5 | 100 |
| | Roche Pharma (Switzerland) Ltd | Reinach | CHF | 2.0 | 100 |
| | Syntex Pharm AG | Basel | CHF | (–) | 100 |
| | Tavero AG | Basel | CHF | 0.1 | 100 |

| Country | Company | City | | Share capital (in millions) | Equity interest (in %) |
|---|---|---|---|---|---|
| Taiwan | Roche Diagnostics Ltd. | Taipei | TWD | 245.0 | 100 |
| | Roche Products Ltd. | Taipei | TWD | 1,000.0 | 100 |
| Thailand | Roche Diagnostics (Thailand) Limited | Bangkok | THB | 103.0 | 100 |
| | Roche Thailand Limited | Bangkok | THB | 12.0 | 100 |
| Tunisia | Roche Tunisie SA | Tunis | TND | 0.8 | 100 |
| Turkey | Roche Diagnostics Turkey Anonim Sirketi | Istanbul | TRY | 80.0 | 100 |
| | Roche Müstahzarlari Sanayi Anonim Sirketi | Istanbul | TRY | 249.5 | 100 |
| Ukraine | Roche Ukraine LLC | Kiev | UAH | 124.0 | 100 |
| United Arab Emirates | Roche Diagnostics Middle East FZCO | Dubai | AED | 19.0 | 100 |
| | Roche Middle East FZCO | Dubai | AED | 0.5 | 100 |
| United Kingdom | InterMune Holdings Limited | Welwyn Garden City | GBP | (–) | 100 |
| | InterMune UK & I Limited | Welwyn Garden City | GBP | (–) | 100 |
| | InterMune UK Limited | Welwyn Garden City | GBP | (–) | 100 |
| | InterMune Bristol Limited | Welwyn Garden City | GBP | (–) | 100 |
| | Kapa Biosystems Ltd | London | GBP | (–) | 100 |
| | Piramed Limited | Welwyn Garden City | GBP | (–) | 100 |
| | Roche Diabetes Care Limited | Burgess Hill | GBP | 0.4 | 100 |
| | Roche Diagnostics Ltd. | Burgess Hill | GBP | 32.6 | 100 |
| | Roche Holding (UK) Limited | Welwyn Garden City | GBP | 100.0 | 100 |
| | Roche Products Limited | Welwyn Garden City | GBP | 98.3 | 100 |
| | Roche Registration Limited | Welwyn Garden City | GBP | (–) | 100 |
| United States | 454 Life Sciences Corporation | Little Falls | USD | (–) | 100 |
| | Adheron Therapeutics Inc. | Wilmington | USD | (–) | 100 |
| | Anadys Pharmaceuticals, Inc. | South San Francisco | USD | (–) | 100 |
| | Ariosa Diagnostics, Inc. | San Jose | USD | (–) | 100 |
| | Bina Technologies, Inc. | Belmont | USD | (–) | 100 |
| | BioVeris Corporation | Indianapolis | USD | (–) | 100 |
| | Genentech USA, Inc. | South San Francisco | USD | (–) | 100 |
| | Genentech, Inc. | South San Francisco | USD | (–) | 100 |
| | GeneWeave Biosciences, Inc. | Los Gatos | USD | (–) | 100 |
| | Genia Technologies, Inc. | Mountain View | USD | (–) | 100 |
| | HLR Consumer Health, Inc. | Little Falls | USD | (–) | 100 |
| | Hoffmann-La Roche Inc. | Little Falls | USD | 3.0 | 100 |
| | IGEN International, Inc. | Pleasanton | USD | (–) | 100 |
| | InterMune, Inc. | South San Francisco | USD | (–) | 100 |
| | IQuum, Inc. | Marlborough | USD | (–) | 100 |
| | Kapa Biosystems, Inc. | Wilmington | USD | (–) | 100 |
| | Memory Pharmaceuticals Corp. | Little Falls | USD | (–) | 100 |
| | Roche Carolina Inc. | Florence | USD | (–) | 100 |
| | Roche Diabetes Care, Inc. | Indianapolis | USD | (–) | 100 |
| | Roche Diagnostics Corporation | Indianapolis | USD | (–) | 100 |
| | Roche Diagnostics Hematology, Inc. | Westborough | USD | (–) | 100 |
| | Roche Diagnostics Operations, Inc. | Indianapolis | USD | (–) | 100 |
| | Roche Health Solutions Inc. | Fishers | USD | (–) | 100 |
| | Roche Holdings, Inc. | South San Francisco | USD | 1.0 | 100 |
| | Roche Laboratories Inc. | Little Falls | USD | (–) | 100 |
| | Roche Molecular Systems, Inc. | Pleasanton | USD | (–) | 100 |
| | Roche NimbleGen, Inc. | Madison | USD | (–) | 100 |
| | Roche Palo Alto LLC | South San Francisco | USD | (–) | 100 |
| | Roche TCRC, Inc. | New York | USD | (–) | 100 |
| | Seragon Pharmaceuticals Inc. | South San Francisco | USD | (–) | 100 |
| | Spring Bioscience Corp. | Pleasanton | USD | (–) | 100 |
| | Ventana Medical Systems, Inc. | Tucson | USD | (–) | 100 |
| Uruguay | Roche International Ltd. – Montevideo Branch | Montevideo | UYU | (–) | 100 |
| Venezuela | Productos Roche S.A. | Caracas | VEF | 78.2 | 100 |
| Vietnam | Roche Vietnam Co., Ltd. | Ho Chi Minh City | USD | 5.0 | 100 |

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

# 32. Significant accounting policies

### Consolidation policy

Subsidiaries are all companies (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Companies acquired during the year are consolidated from the date on which control is transferred to the Group, and subsidiaries to be divested are included up to the date on which control passes from the Group. Inter-company balances, transactions and resulting unrealised income are eliminated in full. Changes in ownership interests in subsidiaries are accounted for as equity transactions if they occur after control has already been obtained and if they do not result in a loss of control. Associates are companies over which the Group exercises, or has the power to exercise, significant influence, but which it does not control and they are accounted for using the equity method.

### Segment reporting

For the purpose of segment reporting the Group's Corporate Executive Committee (CEC) is considered to be the Group's Chief Operating Decision Maker. The determination of the Group's operating segments is based on the organisation units for which information is reported to the CEC on a regular basis. The information provided is used as the basis of the segment revenue and profit disclosures reported in Note 2, with the geographic analysis based on the location of customers. Selected segment balance sheet information is also routinely provided to the CEC.

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

### Foreign currency translation

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

Upon consolidation, assets and liabilities of Group companies using functional currencies other than Swiss francs are translated into Swiss francs using year-end rates of exchange. The income statement and statement of cash flows are translated at the average rates of exchange for the year. Translation differences due to the changes in exchange rates between the beginning and the end of the year and the difference between net income translated at the average and year-end exchange rates are taken directly to other comprehensive income.

## Revenues

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

## Cost of sales

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

## Research and development

Internal research and development activities are expensed as incurred for the following:

- Internal research costs incurred for the purpose of gaining new scientific or technical knowledge and understanding.
- Internal development costs incurred for the application of research findings or other knowledge to plan and develop new products for commercial production. The development projects undertaken by the Group are subject to technical, regulatory and other uncertainties, such that, in the opinion of management, the criteria for capitalisation as intangible assets are not met prior to obtaining marketing approval by the regulatory authorities in major markets.
- Post-marketing studies after regulatory approval, such as phase IV costs in the pharmaceuticals business, generally involve safety surveillance and ongoing technical support of a drug after it receives marketing approval to be sold. They may be required by regulatory authorities or may be undertaken for safety or commercial reasons. The costs of such post-marketing studies are not capitalised as intangible assets, as in the opinion of management, they do not generate separately identifiable incremental future economic benefits that can be reliably measured.

Acquired in-process research and development resources obtained through in-licensing arrangements, business combinations or separate asset purchases are capitalised as intangible assets. The acquired asset must be controlled by the Group, be separately identifiable and expected to generate future economic benefits, even if uncertainty exists as to whether the research and development will ultimately result in a marketable product. Consequently, upfront and milestone payments to third parties for pharmaceutical products or compounds before regulatory marketing approval are recognised as intangible assets. Assets acquired through such arrangements are measured on the basis set out in the 'Intangible assets' policy. Subsequent internal research and development costs incurred post-acquisition are treated in the same way as other internal research and development costs. If research and development are embedded in contracts for strategic alliances, the Group carefully assesses whether upfront or milestone payments constitute funding of research and development work or acquisition of an asset.

## Licensing, milestone and other upfront receipts

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

### Employee benefits

Short-term employee benefits include wages, salaries, social security contributions, paid annual leave and sick leave, profit sharing and bonuses, and non-monetary benefits for current employees. The costs are recognised within the operating results when the employee has rendered the associated service. The Group recognises a liability for profit sharing and bonuses where contractually obliged or where there is a past practice that has created a constructive obligation.

Long-term employee benefits include long-service or sabbatical leave, long-service benefits and long-term disability benefits. The expected costs of these benefits are accrued over the period of employment. Any changes in the carrying value of other long-term employee benefit liabilities are recognised within the operating results.

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. Termination costs are recognised at the earlier of when the Group can no longer withdraw the offer of the benefits or when the Group recognises any related restructuring costs.

### Pensions and other post-employment benefits

For defined contribution plans the Group contributions are recognised within the operating results when the employee has rendered the associated service. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available.

For defined benefit plans the liability recognised in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan assets. All changes in the net defined benefit liability are recognised as they occur as follows:

Recognised in the income statement:
- Current service costs are charged to the appropriate income statement heading within the operating results.
- Past service costs, including curtailment gains or losses, are recognised immediately in general and administration within the operating results.
- Settlement gains or losses are recognised in general and administration within the operating results.
- Net interest on the net defined benefit liability is recognised in financing costs.

Recognised in other comprehensive income:
- Actuarial gains and losses arising from experience adjustments (the difference between previous assumptions and what has actually occurred) and changes in actuarial assumptions.
- The return on plan assets, excluding amounts included in net interest on the net defined benefit liability.
- Any change in the limit on the recognition of plan assets, excluding amounts included in net interest on the net defined benefit liability.

Net interest on the net defined benefit liability is comprised of interest income on plan assets, interest cost on the defined benefit obligation and interest on the effect of the limit on the recognition of pension assets. The net interest is calculated using the same discount rate that is used in calculating the defined benefit obligation, applied to the net defined liability at the start of the period, taking account of any changes from contribution or benefit payments.

Pension assets and liabilities in different defined benefit plans are not offset unless the Group has a legally enforceable right to use the surplus in one plan to settle obligations in the other plan.

### Equity compensation plans

The fair value of all equity compensation awards granted to employees is estimated at the grant date and recorded as an expense over the vesting period. The expense is charged to the appropriate income statement heading within the operating results. For equity-settled plans, an increase in equity is recorded for this expense and any subsequent cash flows from exercises of vested awards are recorded as changes in equity.

**Property, plant and equipment**

Property, plant and equipment are initially recorded at cost of purchase or construction, and include all costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. These include items such as costs of site preparation, installation and assembly costs and professional fees. The net costs of testing whether the asset is functioning properly, including validation costs, are also included in the initially recorded cost of construction. Interest and other borrowing costs incurred with respect to qualifying assets are capitalised and included in the carrying value of the assets. Property, plant and equipment are depreciated on a straight-line basis, except for land, which is not depreciated. The estimated useful lives of major classes of depreciable assets are as follows:

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

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

**Leases**

**Where the Group is the lessee.** Finance leases exist when substantially all of the risks and rewards of ownership are transferred to the Group. Finance leases are capitalised at the start of the lease at fair value, or the present value of the minimum lease payments, if lower. The rental obligation, net of finance charges, is reported within debt. Finance lease assets are depreciated over the shorter of the lease term and its useful life. The interest element of the lease payment is charged against income over the lease term based on the effective interest rate method. Operating leases exist when substantially all of the risks and rewards of ownership are not transferred to the Group. Payments made under operating leases are charged against income on a straight-line basis over the period of the lease.

**Where the Group is the lessor.** Certain assets, mainly Diagnostics instruments, are leased to third parties through both finance and operating lease arrangements. Finance lease assets are reported as receivables at an amount equal to the net investment in the lease. Lease income from finance leases is recognised over the term of the lease based on the effective interest rate method. Operating lease assets are reported within property, plant and equipment. Lease income from operating leases is recognised over the lease term on a straight-line basis.

**Business combinations**

Business combinations are accounted for using the acquisition method of accounting. At the date of acquisition the Group initially recognises the fair value of the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquired business. The consideration transferred is measured at fair value at the date of acquisition. Where the Group does not acquire 100% ownership of the acquired business, non-controlling interests are recorded either at fair value or as the proportion of the fair value of the acquired net assets attributable to the non-controlling interest. Directly attributable acquisition-related costs are expensed as incurred within general and administration expenses.

**Goodwill**

Goodwill arises in a business combination and is the excess of the consideration transferred to acquire the business over the underlying fair value of the net identified assets acquired. Goodwill is not amortised but is tested for impairment at least annually and upon the occurrence of an indication of impairment.

### Intangible assets

Purchased patents, licences, trademarks and other intangible assets are initially recorded at cost. Assets that have been acquired through a business combination are initially recorded at fair value. Once available for use, intangible assets are amortised on a straight-line basis over their useful lives. Intangible assets are reviewed for impairment at each reporting date. The estimated useful life is the lower of the legal duration and the economic useful life. The estimated useful lives of intangible assets are regularly reviewed. Estimated useful lives of major classes of amortisable intangible assets are as follows:

| | |
|---|---|
| Product intangibles in use | up to 20 years |
| Marketing intangibles in use | up to 10 years |
| Technology intangibles in use | up to 14 years |

### Impairment of property, plant and equipment and intangible assets

An impairment assessment is carried out when there is evidence that an asset may be impaired. In addition intangible assets that are not yet available for use are tested for impairment annually. When the recoverable amount of an asset, being the higher of its fair value less costs of disposal and its value in use, is less than its carrying value, then the carrying value is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. Value in use is calculated using estimated cash flows, generally over a five-year period, with extrapolating projections for subsequent years. These are discounted using an appropriate long-term interest rate. When an impairment loss arises, the useful life of the asset is reviewed and, if necessary, the future depreciation/ amortisation charge is accelerated. If the amount of impairment loss subsequently decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, then the previously recognised impairment loss is reversed through the income statement as an impairment reversal.

### Impairment of goodwill

Goodwill is assessed for impairment at each reporting date and is additionally tested annually for impairment. Goodwill is allocated to cash-generating units and when the recoverable amount of the cash-generating unit, being the higher of its fair value less costs of disposal or its value in use, is less than its carrying value, then the carrying value of the goodwill is reduced to its recoverable amount. This reduction is reported in the income statement as an impairment loss. When an acquired business, that is included within a cash-generating unit, permanently ceases to operate then it is treated as a disposal of that business. For separately identifiable goodwill that was generated on the initial acquisition of that business and where all of the factors that made up that goodwill are entirely unrelated to the continuing operations of the cash-generating unit, then the goodwill is deemed to have been disposed of and is fully impaired. The impairment testing methodology is further described in Note 8.

### Inventories

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

### Accounts receivable

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

**Cash and cash equivalents**

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

**Provisions and contingencies**

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

**Fair values**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It is determined by reference to quoted market prices or by the use of established valuation techniques such as option pricing models and the discounted cash flow method if quoted prices in an active market are not available.

**Financial instruments**

Financial instruments are classified into the following categories which are disclosed in Note 29.

**Available-for-sale.** These are non-derivative financial assets that are either designated as such or are not classified in any other financial asset category. Available-for-sale assets are initially recorded and subsequently carried at fair value. Changes in fair value are recorded in other comprehensive income, except for impairments and interest and foreign exchange components. When an investment is derecognised, the cumulative gains and losses in equity are reclassified to financial income (expense). Available-for-sale assets are mainly comprised of marketable securities.

**Fair value – hedging instruments.** These are derivative financial instruments that are used to manage the exposures to foreign currency, interest rate, equity market and credit risks. Derivative financial instruments are initially recorded and subsequently carried at fair value. Apart from those derivatives designated as qualifying cash flow hedging instruments, all changes in fair value are recorded as other financial income (expense).

**Fair value – designated.** These are non-derivative financial instruments that are designated as fair value through profit or loss on initial recognition. Designated fair value instruments are initially recorded and subsequently carried at fair value with changes in fair value recorded in the income statement. Designated fair value instruments are mainly comprised of contingent consideration liabilities with changes in fair value recorded in general and administration within the operating results.

**Loans and receivables.** These are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables are initially recorded at fair value and subsequently carried at amortised cost using the effective interest rate method, less any impairment losses. Loans and receivables are mainly comprised of accounts receivable and cash and cash equivalents.

**Other financial liabilities.** These are non-derivative financial liabilities. Other financial liabilities are initially recorded at fair value and subsequently carried at amortised cost using the effective interest rate method. Other financial liabilities are mainly comprised of debt and trade payables.

A financial asset is derecognised when the contractual cash flows from the asset expire or when the Group transfers the rights to receive the contractual cash flows from the financial assets in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. A financial liability is derecognised when the contractual obligations are discharged, cancelled or expire.

### Impairment of financial assets

Financial assets are individually assessed for possible impairment at each reporting date. An impairment charge is recorded where there is objective evidence of impairment, such as where the issuer is in bankruptcy, default or other significant financial difficulty. Available-for-sale equity securities that have a market value of more than 25% below their original cost, or have a market value below their original cost for a sustained six-month period will be considered as impaired.

For financial assets carried at amortised cost, any impairment charge is the difference between the carrying value and the recoverable amount, calculated using estimated future cash flows discounted using the original effective interest rate. For available-for-sale financial assets, any impairment charge is the amount currently carried in other comprehensive income for the difference between the original cost and the fair value.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For debt securities measured at amortised cost or available-for-sale, the reversal is recognised in income. For equity securities held as available-for-sale, the reversal is recognised directly in other comprehensive income.

### Hedge accounting

The Group uses derivatives to manage its exposures to foreign currency, interest rate, equity market and credit risks. The instruments used may include interest rate swaps, cross-currency swaps, forwards contracts and options. The Group generally limits the use of hedge accounting to certain significant transactions. To qualify for hedge accounting the hedging relationship must meet several strict conditions on documentation, probability of occurrence, hedge effectiveness and reliability of measurement. While many of these transactions can be considered as hedges in economic terms, if the required conditions are not met, then the relationship does not qualify for hedge accounting. In this case the hedging instrument and the hedged item are reported independently as if there were no hedging relationship, which means that any derivatives are reported at fair value, with changes in fair value included in financial income (expense).

**Cash flow hedge.** This is a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction and could affect profit or loss. The hedging instrument is recorded at fair value. The effective portion of the hedge is included in other comprehensive income and any ineffective portion is reported in financial income (expense). If the hedging relationship is the hedge of the foreign currency risk of a firm commitment or highly probable forecasted transaction that results in the recognition of a non-financial item, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in the initial carrying value of the non-financial item at the date of recognition. For all other cash flow hedges, the cumulative changes in the fair value of the hedging instrument that have been recorded in other comprehensive income are included in financial income (expense) when the forecasted transaction affects net income.

**Fair value hedge.** This is a hedge of the exposure to changes in fair value of a recognised asset or liability, or an unrecognised firm commitment, or an identified portion of such an asset, liability or firm commitment, that is attributable to a particular risk and could affect profit or loss. The hedging instrument is recorded at fair value and the hedged item is recorded at its previous carrying value, adjusted for any changes in fair value that are attributable to the hedged risk. Changes in the fair values are reported in financial income (expense).

### Debt

Debt instruments are initially recorded at cost, which is the proceeds received, net of transaction costs. Subsequently they are reported at amortised cost. Any discount between the net proceeds received and the principal value due on redemption is amortised over the duration of the debt instrument and is recognised as part of financing costs using the effective interest rate method.

### Taxation

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

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

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

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

### Own equity instruments

The Group's holdings in its own equity instruments are recorded as a deduction from equity. The original purchase cost, consideration received for subsequent resale of these equity instruments and other movements are reported as changes in equity. These instruments are held for the Group's potential conversion obligations that may arise from the Group's equity compensation plans.

### Changes in accounting policies

In 2015 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.

### Future new and revised standards

The Group is currently assessing the potential impacts of the various new and revised standards and interpretations that will be mandatory from 1 January 2016 which the Group has not yet applied. 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. The Group is also assessing other new and revised standards which are not mandatory until after 2016, notably IFRS 9 'Financial Instruments', IFRS 15 'Revenues from Contracts with Customers' and IFRS 16 'Leases'.

# Report of Roche Management on Internal Control over Financial Reporting

**Report of Roche Management on Internal Control over Financial Reporting**

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

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

Management assessed the effectiveness of its system of internal control over financial reporting as of 31 December 2015 based on the criteria for effective internal control over financial reporting described in *Internal Control – Integrated Framework version 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has concluded that the system of internal control over financial reporting was effective as of 31 December 2015.

The Statutory Auditor KPMG AG has audited the consolidated financial statements of Roche Holding Ltd for the year ended 31 December 2015, in accordance with Swiss Auditing Standards and with the International Standards on Auditing (ISA). They have also issued a report on the effectiveness of the Group's system of internal control over financial reporting. This report is set out on page 127.

Christoph Franz
Chairman of the Board of Directors

Alan Hippe
Chief Financial Officer

Basel, 26 January 2016

# Report of the Statutory Auditor to the General Meeting of Shareholders of Roche Holding Ltd, Basel

### Report of the Statutory Auditor on the Consolidated Financial Statements

As statutory auditor, we have audited the accompanying consolidated financial statements of Roche Holding Ltd, which comprise the income statement, statement of comprehensive income, balance sheet, statement of cash flows, statement of changes in equity and notes on pages 36 to 124 for the year ended 31 December 2015.

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

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

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

**Opinion.** In our opinion, the consolidated financial statements for the year ended 31 December 2015 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with International Financial Reporting Standards (IFRS), and comply with Swiss law.

### Report on Other Legal Requirements

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

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

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

KPMG

**KPMG AG**

| | |
|---|---|
| Ian Starkey | Marc Ziegler |
| Licensed Audit Expert, Auditor in Charge | Licensed Audit Expert |

Basel, 26 January 2016

# Report of the Independent Auditor on Internal Control over Financial Reporting to the Board of Directors of Roche Holding Ltd, Basel

**Report of the Independent Auditor on Internal Control over Financial Reporting**

We have examined the Roche Group's system of internal control over financial reporting as of 31 December 2015, based on criteria established in *Internal Control – Integrated Framework version 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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

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

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

In our opinion, the Roche Group maintained, in all material respects, effective internal control over financial reporting as of 31 December 2015 based on criteria established in *Internal Control – Integrated Framework version 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with Swiss Auditing Standards and International Standards on Auditing, the consolidated financial statements of Roche Holding Ltd for the year ended 31 December 2015 and our report dated 26 January 2016 expressed an unqualified opinion on those consolidated financial statements.

**KPMG AG**

| | |
|---|---|
| Ian Starkey | Marc Ziegler |
| Licensed Audit Expert, Auditor in Charge | Licensed Audit Expert |

Basel, 26 January 2016

# Multi-Year Overview and Supplementary Information

## Multi-Year Overview

Statistics, as reported

| | 2006 | 2007 | 2008 | |
|---|---|---|---|---|
| **Income statement** in millions of CHF | | | | |
| Sales | 42,041 | 46,133 | 45,617 | |
| EBITDA | 14,436 | 17,068 | 16,637 | |
| Operating profit | 11,730 | 14,468 | 13,924 | |
| Net income attributable to Roche shareholders | 7,880 | 9,761 | 8,969 | |
| Research and development | 6,589 | 8,385 | 8,845 | |
| **Balance sheet** in millions of CHF | | | | |
| Non-current assets | 33,519 | 35,349 | 37,485 | |
| Current assets | 40,895 | 42,834 | 38,604 | |
| Total assets | 74,414 | 78,183 | 76,089 | |
| Non-current liabilities | (14,908) | (10,422) | (10,163) | |
| Current liabilities | (12,692) | (14,454) | (12,104) | |
| Total liabilities | (27,600) | (24,876) | (22,267) | |
| Net assets | 46,814 | 53,307 | 53,822 | |
| Capital and reserves attributable to Roche shareholders | 39,444 | 45,347 | 44,479 | |
| Equity attributable to non-controlling interests | 7,370 | 7,960 | 9,343 | |
| Additions to property, plant and equipment | 3,878 | 3,648 | 3,187 | |
| **Personnel** | | | | |
| Number of employees at end of year | 74,372 | 78,604 | 80,080 | |
| **Key ratios** | | | | |
| Net income attributable to Roche shareholders as % of sales | 19 | 21 | 20 | |
| Net income attributable to Roche shareholders as % of equity | 20 | 22 | 20 | |
| Research and development as % of sales | 16 | 18 | 19 | |
| Current ratio % | 322 | 296 | 319 | |
| Equity and non-controlling interests as % of total assets | 63 | 68 | 71 | |
| Human capital return on investment ratio | 2.16 | 2.34 | 2.25 | |
| **Data on shares and non-voting equity securities** | | | | |
| Number of shares | 160,000,000 | 160,000,000 | 160,000,000 | |
| Number of non-voting equity securities *(Genussscheine)* | 702,562,700 | 702,562,700 | 702,562,700 | |
| Total shares and non-voting equity securities | 862,562,700 | 862,562,700 | 862,562,700 | |
| Total dividend in millions of CHF | 2,933 | 3,968 | 4,313 | |
| Earnings per share and non-voting equity security (diluted) in CHF | 9.05 | 11.16 | 10.23 | |
| Dividend per share and non-voting equity security in CHF | 3.40 | 4.60 | 5.00 | |

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

| 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| | | | | | | |
| 49,051 | 47,473 | 42,531 | 45,499 | 46,780 | 47,462 | 48,145 |
| 18,028 | 18,517 | 16,933 | 19,040 | 19,802 | 19,558 | 19,479 |
| 12,277 | 13,486 | 13,454 | 14,125 | 16,376 | 14,090 | 13,821 |
| 7,784 | 8,666 | 9,343 | 9,539 | 11,164 | 9,332 | 8,863 |
| 9,874 | 10,026 | 8,326 | 9,552 | 9,270 | 9,895 | 9,581 |
| | | | | | | |
| 36,086 | 33,408 | 33,344 | 33,434 | 33,003 | 44,426 | 47,581 |
| 38,479 | 27,612 | 28,232 | 31,371 | 29,164 | 31,114 | 28,182 |
| 74,565 | 61,020 | 61,576 | 64,805 | 62,167 | 75,540 | 75,763 |
| (43,084) | (34,380) | (30,884) | (27,868) | (25,166) | (30,874) | (28,695) |
| (22,067) | (14,978) | (16,210) | (20,209) | (15,760) | (23,108) | (23,768) |
| (65,151) | (49,358) | (47,094) | (48,077) | (40,926) | (53,982) | (52,463) |
| 9,414 | 11,662 | 14,482 | 16,728 | 21,241 | 21,558 | 23,300 |
| 7,366 | 9,469 | 12,095 | 14,494 | 19,294 | 19,586 | 20,979 |
| 2,048 | 2,193 | 2,387 | 2,234 | 1,947 | 1,972 | 2,321 |
| 2,837 | 2,633 | 2,006 | 2,130 | 2,458 | 2,905 | 4,077 |
| | | | | | | |
| 81,507 | 80,653 | 80,129 | 82,089 | 85,080 | 88,509 | 91,747 |
| | | | | | | |
| 16 | 18 | 22 | 21 | 24 | 20 | 18 |
| 106 | 92 | 77 | 66 | 58 | 48 | 42 |
| 20 | 21 | 20 | 21 | 20 | 21 | 20 |
| 174 | 184 | 174 | 155 | 185 | 135 | 119 |
| 13 | 19 | 24 | 26 | 34 | 29 | 31 |
| 2.02 | 2.13 | 2.31 | 2.25 | 2.45 | 2.16 | 2.06 |
| | | | | | | |
| 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 |
| 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 |
| 862,562,700 | 862,562,700 | 862,562,700 | 862,562,700 | 862,562,700 | 862,562,700 | 862,562,700 |
| 5,175 | 5,693 | 5,865 | 6,340 | 6,728 | 6,901 | 6,987[a] |
| 9.02 | 10.11 | 10.98 | 11.16 | 12.93 | 10.81 | 10.28 |
| 6.00 | 6.60 | 6.80 | 7.35 | 7.80 | 8.00 | 8.10[a] |

a) 2015 dividend proposed by the Board of Directors.

## Sales by Division in millions of CHF

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Pharmaceuticals | 32,794 | 35,232 | 36,304 | 36,696 | 37,331 |
| Diagnostics | 9,737 | 10,267 | 10,476 | 10,766 | 10,814 |
| **Total** | **42,531** | **45,499** | **46,780** | **47,462** | **48,145** |

## Sales by geographical area in millions of CHF

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Switzerland | 507 | 505 | 526 | 526 | 497 |
| Germany | 2,595 | 2,534 | 2,729 | 2,900 | 2,734 |
| Rest of Europe | 11,706 | 11,308 | 11,341 | 11,119 | 10,046 |
| **Europe** | **14,808** | **14,347** | **14,596** | **14,545** | **13,277** |
| United States | 14,133 | 15,932 | 17,169 | 18,041 | 20,164 |
| Rest of North America | 1,047 | 1,035 | 1,042 | 962 | 855 |
| **North America** | **15,180** | **16,967** | **18,211** | **19,003** | **21,019** |
| Latin America | 3,115 | 3,410 | 3,363 | 3,285 | 2,832 |
| Japan | 4,314 | 4,735 | 3,936 | 3,755 | 3,648 |
| Rest of Asia | 3,616 | 4,368 | 5,129 | 5,327 | 6,006 |
| **Asia** | **7,930** | **9,103** | **9,065** | **9,082** | **9,654** |
| Africa, Australia and Oceania | 1,498 | 1,672 | 1,545 | 1,547 | 1,363 |
| **Total** | **42,531** | **45,499** | **46,780** | **47,462** | **48,145** |

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

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Pharmaceuticals | 1,049 | 1,049 | 1,294 | 1,674 | 2,706 |
| Diagnostics | 956 | 1,079 | 1,158 | 1,228 | 1,363 |
| Corporate | 1 | 2 | 6 | 3 | 8 |
| **Total** | **2,006** | **2,130** | **2,458** | **2,905** | **4,077** |

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

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Switzerland | 381 | 398 | 487 | 691 | 964 |
| Germany | 352 | 318 | 456 | 527 | 602 |
| Rest of Europe | 353 | 371 | 317 | 335 | 349 |
| **Europe** | **1,086** | **1,087** | **1,260** | **1,553** | **1,915** |
| United States | 401 | 411 | 515 | 683 | 1,382 |
| Rest of North America | 5 | 8 | 51 | 6 | 4 |
| **North America** | **406** | **419** | **566** | **689** | **1,386** |
| Latin America | 115 | 135 | 104 | 113 | 132 |
| Japan | 185 | 186 | 137 | 154 | 230 |
| Rest of Asia | 194 | 270 | 362 | 371 | 379 |
| **Asia** | **379** | **456** | **499** | **525** | **609** |
| Africa, Australia and Oceania | 20 | 33 | 29 | 25 | 35 |
| **Total** | **2,006** | **2,130** | **2,458** | **2,905** | **4,077** |

# Supplementary core results and EPS information

The Group's basic and diluted earnings per share is given in Note 27 to the Annual Financial Statements. To allow for a transparent assessment of both the actual results and the underlying performance of the business the full income statement for the Group and the operating results of the Divisions are shown on both an IFRS and core basis.

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 6) are excluded.
- Amortisation and impairment of intangible assets (see Note 9) and impairment of goodwill (see Note 8) 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 (currently none) would be excluded.
- Material one-time treasury items such as major debt restructurings (see Note 20) are excluded.
- Pension plan settlements (see Note 25) are excluded.
- The tax benefit recorded under IFRS in respect of Equity Compensation Plans (ECPs), which varies according to price of the underlying equity, is replaced by a normalised tax benefit, being the IFRS 2 expense multiplied by the applicable tax rate (see Note 4).

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 – 2015 in millions of CHF

| | IFRS | Global restruc-turing | Intangibles amorti-sation | Intangibles impairment | Alliances & business combi-nations | Legal & environ-mental | Major debt restruc-turing | Pension plan settlements | Normali-sation of ECP tax benefit | Core |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales | 48,145 | – | – | – | – | – | – | – | – | 48,145 |
| Royalties and other operating income | 2,258 | – | – | – | – | – | – | – | – | 2,258 |
| Cost of sales | (15,460) | 654 | 1,548 | – | 552 | – | – | – | – | (12,706) |
| Marketing and distribution | (8,814) | 203 | 1 | – | – | – | – | – | – | (8,610) |
| Research and development | (9,581) | 57 | 123 | 69 | – | – | – | – | – | (9,332) |
| General and administration | (2,727) | 148 | – | – | 201 | 170 | – | (5) | – | (2,213) |
| **Operating profit** | **13,821** | **1,062** | **1,672** | **69** | **753** | **170** | **–** | **(5)** | **–** | **17,542** |
| Financing costs | (1,574) | 1 | – | – | 40 | 12 | 381 | – | – | (1,140) |
| Other financial income (expense) | (260) | – | – | – | (16) | – | – | – | – | (276) |
| **Profit before taxes** | **11,987** | **1,063** | **1,672** | **69** | **777** | **182** | **381** | **(5)** | **–** | **16,126** |
| Income taxes | (2,931) | (195) | (818) | (20) | (183) | (40) | (133) | 1 | 30 | (4,289) |
| **Net income** | **9,056** | **868** | **854** | **49** | **594** | **142** | **248** | **(4)** | **30** | **11,837** |
| Attributable to | | | | | | | | | | |
| – Roche shareholders | 8,863 | 863 | 845 | 47 | 594 | 141 | 248 | (4) | 29 | 11,626 |
| – Non-controlling interests | 193 | 5 | 9 | 2 | – | 1 | – | – | 1 | 211 |

## Core results reconciliation – 2014 in millions of CHF

| | IFRS | Global restruc-turing | Intangibles amorti-sation | Intangibles impairment | Alliances & business combi-nations | Legal & environ-mental | Major debt restruc-turing | Normali-sation of ECP tax benefit | Core |
|---|---|---|---|---|---|---|---|---|---|
| Sales | 47,462 | – | – | – | – | – | – | – | 47,462 |
| Royalties and other operating income | 2,404 | – | – | – | – | – | – | – | 2,404 |
| Cost of sales | (13,381) | 139 | 637 | 225 | 39 | – | – | – | (12,341) |
| Marketing and distribution | (8,657) | 219 | 2 | – | – | – | – | – | (8,436) |
| Research and development | (9,895) | 106 | 67 | 809 | – | – | – | – | (8,913) |
| General and administration | (3,843) | 191 | – | 874 | 23 | 215 | – | – | (2,540) |
| **Operating profit** | **14,090** | **655** | **706** | **1,908** | **62** | **215** | **–** | **–** | **17,636** |
| Financing costs | (1,821) | 2 | – | – | 9 | 19 | 429 | – | (1,362) |
| Other financial income (expense) | 246 | – | – | – | – | – | – | – | 246 |
| **Profit before taxes** | **12,515** | **657** | **706** | **1,908** | **71** | **234** | **429** | **–** | **16,520** |
| Income taxes | (2,980) | (241) | (237) | (328) | (39) | (44) | (150) | 32 | (3,987) |
| **Net income** | **9,535** | **416** | **469** | **1,580** | **32** | **190** | **279** | **32** | **12,533** |
| Attributable to | | | | | | | | | |
| – Roche shareholders | 9,332 | 416 | 468 | 1,580 | 32 | 190 | 279 | 32 | 12,329 |
| – Non-controlling interests | 203 | – | 1 | – | – | – | – | – | 204 |

## Divisional core results reconciliation – 2015 in millions of CHF

| | IFRS | Global restruc-turing | Intangibles amorti-sation | Intangibles impairment | Alliances & business combi-nations | Legal & environ-mental | Pension plan settlements | Core |
|---|---|---|---|---|---|---|---|---|
| **Pharmaceuticals** | | | | | | | | |
| Sales | 37,331 | – | – | – | – | – | – | 37,331 |
| Royalties and other operating income | 2,119 | – | – | – | – | – | – | 2,119 |
| Cost of sales | (10,249) | 558 | 1,239 | – | 552 | – | – | (7,900) |
| Marketing and distribution | (6,154) | 87 | 1 | – | – | – | – | (6,066) |
| Research and development | (8,367) | 46 | 118 | 69 | – | – | – | (8,134) |
| General and administration | (1,677) | 65 | – | – | 162 | 158 | (3) | (1,295) |
| **Operating profit** | **13,003** | **756** | **1,358** | **69** | **714** | **158** | **(3)** | **16,055** |
| **Diagnostics** | | | | | | | | |
| Sales | 10,814 | – | – | – | – | – | – | 10,814 |
| Royalties and other operating income | 139 | – | – | – | – | – | – | 139 |
| Cost of sales | (5,211) | 96 | 309 | – | – | – | – | (4,806) |
| Marketing and distribution | (2,660) | 116 | – | – | – | – | – | (2,544) |
| Research and development | (1,214) | 11 | 5 | – | – | – | – | (1,198) |
| General and administration | (579) | 77 | – | – | 39 | 7 | (2) | (458) |
| **Operating profit** | **1,289** | **300** | **314** | **–** | **39** | **7** | **(2)** | **1,947** |
| **Corporate** | | | | | | | | |
| General and administration | (471) | 6 | – | – | – | 5 | – | (460) |
| **Operating profit** | **(471)** | **6** | **–** | **–** | **–** | **5** | **–** | **(460)** |

## Divisional core results reconciliation – 2014 in millions of CHF

| | IFRS | Global restruc-turing | Intangibles amorti-sation | Intangibles impairment | Alliances & business combi-nations | Legal & environ-mental | Core |
|---|---|---|---|---|---|---|---|
| **Pharmaceuticals** | | | | | | | |
| Sales | 36,696 | – | – | – | – | – | 36,696 |
| Royalties and other operating income | 2,273 | – | – | – | – | – | 2,273 |
| Cost of sales | (8,013) | 82 | 341 | – | 39 | – | (7,551) |
| Marketing and distribution | (6,130) | 155 | 1 | – | – | – | (5,974) |
| Research and development | (8,380) | 101 | 66 | 337 | – | – | (7,876) |
| General and administration | (2,142) | 53 | – | 322 | 21 | 179 | (1,567) |
| **Operating profit** | **14,304** | **391** | **408** | **659** | **60** | **179** | **16,001** |
| **Diagnostics** | | | | | | | |
| Sales | 10,766 | – | – | – | – | – | 10,766 |
| Royalties and other operating income | 131 | – | – | – | – | – | 131 |
| Cost of sales | (5,368) | 57 | 296 | 225 | – | – | (4,790) |
| Marketing and distribution | (2,527) | 64 | 1 | – | – | – | (2,462) |
| Research and development | (1,515) | 5 | 1 | 472 | – | – | (1,037) |
| General and administration | (1,242) | 138 | – | 552 | 2 | 38 | (512) |
| **Operating profit** | **245** | **264** | **298** | **1,249** | **2** | **38** | **2,096** |
| **Corporate** | | | | | | | |
| General and administration | (459) | – | – | – | – | (2) | (461) |
| **Operating profit** | **(459)** | **–** | **–** | **–** | **–** | **(2)** | **(461)** |

## Core EPS (basic)

| | 2015 | 2014 |
|---|---|---|
| Core net income attributable to Roche shareholders (CHF millions) | 11,626 | 12,329 |
| Weighted average number of shares and non-voting equity securities in issue (millions) [27] | 851 | 849 |
| | | |
| **Core earnings per share (basic) (CHF)** | **13.66** | **14.53** |

## Core EPS (diluted)

| | 2015 | 2014 |
|---|---|---|
| Core net income attributable to Roche shareholders (CHF millions) | 11,626 | 12,329 |
| Increase in non-controlling interests' share of core net income, assuming all outstanding Chugai stock options exercised (CHF millions) | (1) | (1) |
| **Net income used to calculate diluted earnings per share (CHF millions)** | **11,625** | **12,328** |
| | | |
| **Weighted average number of shares and non-voting equity securities in issue used to calculate diluted earnings per share (millions) [27]** | **862** | **863** |
| | | |
| **Core earnings per share (diluted) (CHF)** | **13.49** | **14.29** |

# Supplementary operating free cash flow information

**Divisional operating free cash flow information** in millions of CHF

| | Pharmaceuticals | | Diagnostics | | Corporate | | Group | |
|---|---|---|---|---|---|---|---|---|
| | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2014 |
| **Depreciation, amortisation and impairment** | | | | | | | | |
| Depreciation of property, plant and equipment | 1,098 | 1,037 | 863 | 872 | 7 | 8 | 1,968 | 1,917 |
| Amortisation of intangible assets | 1,358 | 408 | 314 | 298 | – | – | 1,672 | 706 |
| Impairment of property, plant and equipment | 180 | 46 | 11 | 5 | – | – | 191 | 51 |
| Impairment of goodwill | – | 322 | – | 552 | – | – | – | 874 |
| Impairment of intangible assets | 69 | 337 | – | 697 | – | – | 69 | 1,034 |
| **Total** | **2,705** | **2,150** | **1,188** | **2,424** | **7** | **8** | **3,900** | **4,582** |
| | | | | | | | | |
| **Other adjustments** | | | | | | | | |
| Add back | | | | | | | | |
| – Expenses for equity-settled equity compensation plans | 323 | 282 | 53 | 43 | 27 | 25 | 403 | 350 |
| – Net (income) expense for provisions | 788 | 695 | 183 | 169 | 7 | 3 | 978 | 867 |
| – Net (gain) loss from disposals | (29) | (444) | 7 | 12 | – | – | (22) | (432) |
| – Non-cash working capital and other items | 976 | 368 | 76 | 100 | 1 | (1) | 1,053 | 467 |
| Deduct | | | | | | | | |
| – Utilisation of provisions | (539) | (552) | (151) | (250) | (145) | (71) | (835) | (873) |
| – Proceeds from disposals | 90 | 280 | 25 | 39 | – | – | 115 | 319 |
| **Total** | **1,609** | **629** | **193** | **113** | **(110)** | **(44)** | **1,692** | **698** |
| | | | | | | | | |
| **Operating profit cash adjustments** | **4,314** | **2,779** | **1,381** | **2,537** | **(103)** | **(36)** | **5,592** | **5,280** |
| | | | | | | | | |
| **EBITDA** | | | | | | | | |
| Core operating profit | 16,055 | 16,001 | 1,947 | 2,096 | (460) | (461) | 17,542 | 17,636 |
| Depreciation and impairment of property, plant and equipment – Core basis | 1,066 | 1,041 | 864 | 873 | 7 | 8 | 1,937 | 1,922 |
| **EBITDA** | **17,121** | **17,042** | **2,811** | **2,969** | **(453)** | **(453)** | **19,479** | **19,558** |
| – margin, % of sales | 45.9 | 46.4 | 26.0 | 27.6 | – | – | 40.5 | 41.2 |

# Supplementary balance sheet information

**Net operating assets to balance sheet reconciliation – 2015** in millions of CHF

| | Pharmaceuticals | Diagnostics | Corporate | Taxation and Treasury | Roche Group |
|---|---|---|---|---|---|
| Property, plant and equipment | 13,082 | 5,250 | 141 | – | 18,473 |
| Goodwill | 5,365 | 5,717 | – | – | 11,082 |
| Intangible assets | 10,955 | 2,906 | – | – | 13,861 |
| Inventories | 5,655 | 1,993 | – | – | 7,648 |
| Provisions | (3,298) | (947) | (391) | – | (4,636) |
| Current income tax net liabilities | – | – | – | (2,542) | (2,542) |
| Deferred tax net assets | – | – | – | 2,019 | 2,019 |
| Defined benefit plan net liabilities | – | – | – | (7,699) | (7,699) |
| Marketable securities | – | – | – | 5,440 | 5,440 |
| Cash and cash equivalents | – | – | – | 3,731 | 3,731 |
| Debt | – | – | – | (23,251) | (23,251) |
| Other net assets (liabilities) | | | | | |
| – Net working capital | (1,218) | 540 | (108) | – | (786) |
| – Long-term net operating assets | 75 | (27) | (8) | – | 40 |
| – Other | – | – | – | (80) | (80) |
| **Total net assets** | **30,616** | **15,432** | **(366)** | **(22,382)** | **23,300** |

**Net operating assets to balance sheet reconciliation – 2014** in millions of CHF

| | Pharmaceuticals | Diagnostics | Corporate | Taxation and Treasury | Roche Group |
|---|---|---|---|---|---|
| Property, plant and equipment | 11,919 | 5,136 | 140 | – | 17,195 |
| Goodwill | 4,643 | 5,287 | – | – | 9,930 |
| Intangible assets | 11,084 | 1,715 | – | – | 12,799 |
| Inventories | 5,736 | 2,007 | – | – | 7,743 |
| Provisions | (2,982) | (714) | (547) | – | (4,243) |
| Current income tax net liabilities | – | – | – | (2,372) | (2,372) |
| Deferred tax net assets | – | – | – | 2,325 | 2,325 |
| Defined benefit plan net liabilities | – | – | – | (8,303) | (8,303) |
| Marketable securities | – | – | – | 7,961 | 7,961 |
| Cash and cash equivalents | – | – | – | 3,742 | 3,742 |
| Debt | – | – | – | (25,714) | (25,714) |
| Other net assets (liabilities) | | | | | |
| – Net working capital | 152 | 735 | (96) | – | 791 |
| – Long-term net operating assets | 396 | (46) | (11) | – | 339 |
| – Other | – | – | – | (635) | (635) |
| **Total net assets** | **30,948** | **14,120** | **(514)** | **(22,996)** | **21,558** |

As disclosed in Note 5, the goodwill and intangible assets for the Pharmaceuticals and Diagnostics Divisions and the deferred tax net assets for the Group at 31 December 2014 have been restated following the finalisation of the valuation of the net assets acquired related to the InterMune, Dutalys and Bina acquisitions in 2014. A reconciliation to the previously published balance sheet is provided in Note 5.

# Non-GAAP measures

The financial information included in the Financial Review includes certain non-GAAP measures which are not accounting measures as defined by IFRS, in particular, the core results, net working capital, net operating assets, free cash flow and constant exchange rates. These non-GAAP measures should not be used instead of, or considered as alternatives to, the Group's consolidated financial results based on IFRS. These non-GAAP measures may not be comparable to similarly titled measures disclosed by other companies.

### Core results

Core results allow for an assessment of both the Group's actual results as defined by IFRS and the underlying performance of the business. The core results concept is explained on page 131.

### Net working capital

Net working capital is used to assess the Group's efficiency in utilising assets and short-term liquidity. Net trade working capital is calculated as trade receivables and inventories minus trade payables. Net working capital is calculated as net trade working capital adjusted for other receivables and other payables.

### Net operating assets

Net operating assets allow for an assessment of the Group's operating performance of the business independently from financing and tax activities. Net operating assets are calculated as property, plant and equipment, goodwill, intangible assets, net working capital and long-term net operating assets minus provisions.

### Free cash flow

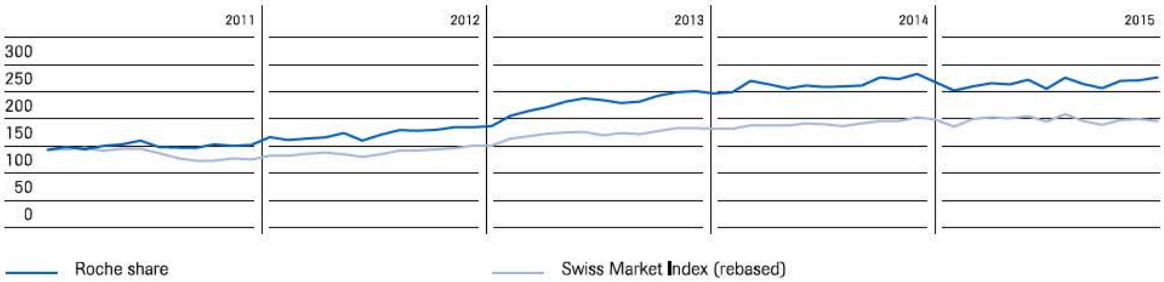
Free cash flow is used to assess the Group's ability to generate the cash required to conduct and maintain its operations. Operating free cash flow is calculated based on the IFRS operating profit and adjusted for certain cash items, movements in net working capital and capital expenditures (investments in property, plant and equipment and intangible assets). Free cash flow is calculated as the operating free cash flow adjusted for treasury activities, taxes paid and dividends paid.

### Constant exchange rates

Certain percentage changes in the Financial Review have been calculated using constant exchange rates ('CER') which allow for an assessment of the Group's financial performance with the effects of exchange rate fluctuations eliminated. The percentage changes at constant exchange rates are calculated using simulations by reconsolidating both the current reported period and the prior period numbers at constant currency exchange rates, equalling the average exchange rates for the prior year. For example, a CER change between a 2015 line item and its 2014 equivalent is calculated using the average exchange rate for the year ended 31 December 2014 for both the 2015 line item and the 2014 line item and subsequently calculating the change in percent with respect to the two recalculated numbers.

# Roche Securities

Price development of share in CHF




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


Price development of American Depositary Receipt (ADR) in USD


Eight Roche American Depositary Receipts (ADRs) are equivalent to one non-voting equity security *(Genussschein)*. ADRs have been traded in the US over-the-counter market since July 1992.
Information in these tables is restated for the change in the ratio for the ADRs from 1:1 to 2:1 effective 24 January 2005, the change in the ratio for the ADRs from 2:1 to 4:1 effective 9 January 2009 and the change in the ratio for the ADRs from 4:1 to 8:1 effective 27 February 2014.

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

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Number of shares (nominal value: CHF 1.00) | 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 | 160,000,000 |
| Number of non-voting equity securities *(Genussscheine)* (no nominal value) | 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 | 702,562,700 |
| **Total** | **862,562,700** | **862,562,700** | **862,562,700** | **862,562,700** | **862,562,700** |
| Number of own shares and non-voting equity securities *(Genussscheine)* held | (15,084,967) | (14,093,890) | (13,537,704) | (12,819,364) | (10,542,434) |
| **Total in issue** | **847,477,733** | **848,468,810** | **849,024,996** | **849,743,336** | **852,020,266** |

### Data per share and non-voting equity security in CHF

| | | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|
| Earnings (basic) | | 11.01 | 11.12 | 13.16 | 10.99 | 10.42 |
| Earnings (diluted) | | 10.98 | 11.03 | 12.93 | 10.81 | 10.28 |
| Core earnings (basic) | | 12.33 | 13.60 | 14.52 | 14.53 | 13.66 |
| Core earnings (diluted) | | 12.30 | 13.49 | 14.27 | 14.29 | 13.49 |
| Equity attributable to Roche shareholders | | 14.27 | 17.08 | 22.73 | 23.05 | 24.62 |
| Dividend | | 6.80 | 7.35 | 7.80 | 8.00 | 8.10[c] |
| Stock price of share[b] | Opening | 142.80 | 166.60 | 186.90 | 247.40 | 267.75 |
| | High | 167.00 | 191.70 | 258.50 | 289.00 | 284.50 |
| | Low | 123.80 | 157.10 | 186.90 | 239.40 | 244.40 |
| | Year-end | 166.60 | 186.90 | 247.40 | 267.75 | 276.75 |
| Stock price of non-voting equity security *(Genussschein)*[b] | Opening | 137.00 | 159.20 | 184.00 | 249.20 | 269.90 |
| | High | 159.70 | 188.60 | 258.50 | 294.60 | 286.20 |
| | Low | 117.00 | 149.20 | 184.00 | 239.00 | 241.70 |
| | Year-end | 159.20 | 184.00 | 249.20 | 269.90 | 276.40 |

### Market capitalisation in millions of CHF

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Year-end | 136,102 | 156,582 | 211,291 | 229,003 | 235,554 |

### Key ratios (year-end)

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| Dividend yield of shares in % | 4.1 | 3.9 | 3.2 | 3.0 | 2.9 |
| Dividend yield of non-voting equity securities *(Genussscheine)* in % | 4.3 | 4.0 | 3.1 | 3.0 | 2.9 |
| Price/earnings of shares | 15 | 17 | 19 | 25 | 27 |
| Price/earnings of non-voting equity securities *(Genussscheine)* | 15 | 16 | 19 | 25 | 27 |

a) Each non-voting equity security *(Genussschein)* confers the same rights as any of the shares to participate in the available earnings and any remaining proceeds from liquidation following repayment of the nominal value of the shares and the participation certificate capital (if any). Shares and non-voting equity securities are listed on the SIX Swiss Exchange. Roche Holding Ltd has no restrictions as to ownership of its shares or non-voting equity securities.
b) All stock price data reflect daily closing prices.
c) 2015 dividend proposed by the Board of Directors.

### Ticker symbols

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

# Roche Holding Ltd, Basel

# Financial Statements

## Balance sheet in millions of CHF

| | 31 December 2015 | 31 December 2014 |
|---|---|---|
| **Current assets** | | |
| Cash and cash equivalents | 1,077 | 1,094 |
| Marketable securities | 811 | 1,581 |
| Accounts receivable from Group companies | 4,183 | 3,504 |
| Short-term loans to Group companies | 1,000 | 1,100 |
| Other current receivables | 1 | 2 |
| **Total current assets** | **7,072** | **7,281** |
| **Non-current assets** | | |
| Long-term loans to Group companies | 621 | 622 |
| Investments | 8,850 | 9,166 |
| **Total non-current assets** | **9,471** | **9,788** |
| **Total assets** | **16,543** | **17,069** |
| **Short-term liabilities** | | |
| Accounts payable to Group companies | 17 | 30 |
| Short-term interest-bearing liabilities to Group companies | – | 604 |
| Other short-term liabilities | 24 | 20 |
| Short-term provisions | – | 90 |
| **Total short-term liabilities** | **41** | **744** |
| **Long-term liabilities** | | |
| Provisions | 35 | 35 |
| **Total long-term liabilities** | **35** | **35** |
| **Total liabilities** | **76** | **779** |
| **Shareholders' equity** | | |
| Share capital | 160 | 160 |
| Non-voting equity securities *(Genussscheine)* | p.m. | p.m. |
| Legal retained earnings: | | |
| – General legal retained earnings | 300 | 300 |
| Voluntary reserves and retained earnings: | | |
| – Free reserve | 6,000 | 6,000 |
| – Special reserve | 2,152 | 2,152 |
| – Available earnings | | |
| – Balance brought forward from previous year | 866 | 1,017 |
| – Net income for the year | 7,004 | 6,749 |
| Own equity instruments | (15) | (88) |
| **Total shareholders' equity** | **16,467** | **16,290** |
| **Total shareholders' equity and liabilities** | **16,543** | **17,069** |

The presentation of the balance sheet at 31 December 2014 has been adjusted following changes from the new law on accounting and financial reporting contained in the 32nd title of the Swiss Code of Obligations (CO) that were adopted on 1 January 2015.

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

## Income statement in millions of CHF

| | Year ended 31 December 2015 | 2014 |
|---|---|---|
| **Income** | | |
| Income from investments (dividend income) | 6,831 | 6,640 |
| Other financial income | | |
| – Interest income from loans to Group companies | 32 | 27 |
| – Income from marketable securities and other | 103 | 28 |
| Guarantee fee income from Group companies | 113 | 121 |
| Other income | 41 | 36 |
| **Total income** | **7,120** | **6,852** |
| **Expenses** | | |
| Administration expenses | (40) | (37) |
| Other expenses | (51) | (46) |
| Financial expenses | (5) | (3) |
| Direct taxes | (20) | (17) |
| **Total expenses** | **(116)** | **(103)** |
| **Net income** | **7,004** | **6,749** |

The presentation of the income statement for the year ended 31 December 2014 has been adjusted following changes from the new law on accounting and financial reporting contained in the 32nd title of the Swiss Code of Obligations (CO) that were adopted on 1 January 2015.

# Notes to the Financial Statements

## 1. Summary of significant accounting policies

**Basis of preparation**

The financial statements of Roche Holding Ltd, Basel (the 'Company') have been prepared in accordance with the provisions of Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting principles applied are described below.

The changes from the new law on accounting and financial reporting contained in the 32nd title of the Swiss Code of Obligations (CO) were adopted on 1 January 2015 and the comparative financial information for 2014 has been adjusted.

The Company has prepared its consolidated financial statements in accordance with a recognised accounting standard (International Financial Reporting Standards). In accordance with the CO the Company decided to forgo presenting additional information on audit fees in the notes as well as a cash flow statement.

**Valuation methods and translation of foreign currencies**

Marketable securities are reported at the lower of cost or market value. All other financial assets, including investments, are reported at cost less appropriate write-downs. Own equity instruments are recognised at cost and deducted from equity at the time of purchase. If the own equity instruments are sold, the gain or loss is recognised through the income statement. Assets and liabilities denominated in foreign currencies are translated into Swiss francs using year-end rates of exchange, except investments which are translated at historical rates. Transactions during the year which are denominated in foreign currencies are translated at the exchange rates effective at the relevant transaction dates. Resulting exchange gains and losses are recognised in the income statement with the exception of unrealised gains which are deferred.

**Investments**

The major direct and indirect investments of the company are listed in Note 31 to the Roche Group Annual Financial Statements. Ownership interests equal voting rights.

**Taxes**

Direct taxes include corporate income and capital taxes.

## 2. Shareholders' equity

**Share capital**

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

**Own equity instruments**

During 2015 and 2014 the Company did not purchase any Roche shares. The Company sold 316,915 Roche shares (2014: 563,324 Roche shares) with an average sales price of CHF 261.46 per share (2014: CHF 262.64 per share) and with a net gain of CHF 10 million (2014: net gain of CHF 19 million). Dividend income amounted to CHF 2 million (2014: CHF 6 million).

At 31 December 2015 the Company held the remaining 68,111 Roche shares (2014: 385,026 Roche shares) with a cost of CHF 15 million (2014: CHF 88 million) which are deducted from equity. The number of own equity instruments held by the Company and its subsidiaries (excluding foundations) meets the definitions and requirements of Article 659b CO. Within the Roche Group Annual Financial Statements some entities (mainly foundations) are included in the consolidation, which do not qualify as subsidiaries under Article 659b CO.

**Movement in recognised amounts** in millions of CHF

| | | | Voluntary reserves and retained earnings | | | | |
|---|---|---|---|---|---|---|---|
| | Share capital | Legal retained earnings | Free reserve | Special reserve | Available earnings | Own equity instruments | Total equity |
| As at 1 January 2013 | 160 | 300 | 6,000 | 2,152 | 7,142 | – | 15,754 |
| Net income | – | – | – | – | 6,943 | – | 6,943 |
| Dividends | – | – | – | – | (6,340) | – | (6,340) |
| Transactions in own equity instruments | – | – | – | – | – | (217) | (217) |
| **As at 31 December 2013** | **160** | **300** | **6,000** | **2,152** | **7,745** | **(217)** | **16,140** |
| Net income | – | – | – | – | 6,749 | – | 6,749 |
| Dividends | – | – | – | – | (6,728) | – | (6,728) |
| Transactions in own equity instruments | – | – | – | – | – | 129 | 129 |
| **As at 31 December 2014** | **160** | **300** | **6,000** | **2,152** | **7,766** | **(88)** | **16,290** |
| Net income | – | – | – | – | 7,004 | – | 7,004 |
| Dividends | – | – | – | – | (6,900) | – | (6,900) |
| Transactions in own equity instruments | – | – | – | – | – | 73 | 73 |
| **As at 31 December 2015** | **160** | **300** | **6,000** | **2,152** | **7,870** | **(15)** | **16,467** |

Movement in recognised amounts in equity has been adjusted following changes from the new law on accounting and financial reporting contained in the 32nd title of the Swiss Code of Obligations (CO) that were adopted on 1 January 2015.

# 3. Contingent liabilities

**Guarantees**

The Company has issued guarantees for certain bonds and notes, commercial paper and credit facilities of Group companies.
The nominal amount outstanding at 31 December 2015 was CHF 22.2 billion (2014: CHF 23.6 billion). These are described in Note 20 to the Roche Group Annual Financial Statements.

# 4. Significant shareholders

All shares in the Company are bearer shares, and for this reason the Company does not keep a register of shareholders. The following figures are based on information from shareholders, the shareholder validation check at the Annual General Meeting of 3 March 2015 and on other information available to the Company.

**Controlling shareholders**

At 31 December 2015 and 2014, based on information supplied to the Group, a shareholder group with pooled voting rights owned 72,018,000 shares, which represented 45.01% of the issued shares. This group consisted of Ms Vera Michalski-Hoffmann, Ms Maja Hoffmann, Mr André Hoffmann, Dr Andreas Oeri, Ms Sabine Duschmalé-Oeri, Ms Catherine Oeri, Mr Jörg Duschmalé, Mr Lukas Duschmalé and the charitable foundation Wolf. The shareholder pooling agreement has existed since 1948. The figures above do not include any shares without pooled voting rights that are held outside this group by individual members of the group. Ms Maja Oeri, formerly a member of the pool, now holds 8,091,900 shares representing 5.057% of the voting rights independently of the pool.

At 31 December 2015, based on information supplied to the Group, 53,332,863 shares (2014: 53,332,863 shares) are owned by Novartis Ltd, Basel, including affiliates thereof (participation below 33⅓%).

# 5. Full-time equivalents

The annual average number of full-time equivalents for 2015 and 2014 did not exceed ten people.

# 6. Board and Executive shareholdings

**Board of Directors**

Directors Mr André Hoffmann and Dr Andreas Oeri and certain other members of the founder's families who are closely associated with them belong to a shareholder group with pooled voting rights. At the end of 2015 and 2014 this group held 72,018,000 shares (45.01% of issued shares). Detailed information about this group is given in Note 4. In addition at the end of the year the members of the Board of Directors and persons closely associated with them held shares and non-voting equity securities *(Genussscheine)* as shown in the table below.

At the Annual General Meeting on 1 March 2016, Dame DeAnne Julius and Professor Dr Beatrice Weder di Mauro will not stand for re-election. Mrs Julie Brown and Dr Claudia Süssmuth Dyckerhoff will be nominated for election as new members of the Board of Directors.

Shareholdings of members of the Board of Directors

| | Shares | | Non-voting equity securities *(Genussscheine)* | | |
|---|---|---|---|---|---|
| | 2015 | 2014 | 2015 | 2014 | Other |
| C. Franz | 3,663 | – | 350 | 350 | |
| A. Hoffmann | –[a] | –[a] | 200 | 200 | |
| P. Baschera | 1 | 1 | 4,600 | 4,600 | |
| J. Bell | 300 | 300 | 1,647 | 1,647 | |
| P. Bulcke | – | – | 2,500 | 1,350 | |
| D. Julius | 350 | 350 | 2,050 | 2,050 | |
| R.P. Lifton | – | n/a | – | n/a | |
| A. Oeri | –[a] | –[a] | 187,793 | 187,793 | |
| B. Poussot | – | n/a | – | n/a | |
| S. Schwan | – | – | – | – | [b], [c] |
| P.R. Voser | – | – | 3,600 | 3,600 | |
| B. Weder di Mauro | 200 | 200 | 800 | 800 | |
| **Total** | **4,514** | **851** | **203,540** | **202,390** | |

a) Does not include shares held in the shareholder group with pooled voting rights.
b) Equity compensation awards: Roche Option Plan, S-SARs, RSUs and Roche Performance Share Plan. See below.
c) As a member of the Corporate Executive Committee, Dr Schwan's shareholdings are disclosed in the tables below.

## Corporate Executive Committee

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

### Shareholdings of members of the Corporate Executive Committee

| | Shares 2015 | Shares 2014 | Non-voting equity securities (Genussscheine) 2015 | Non-voting equity securities (Genussscheine) 2014 | Other |
|---|---|---|---|---|---|
| S. Schwan | 115,745 | 91,279 | 16,179 | 14,065 | a) |
| S. Ayyoubi | 12,622 | 8,104 | 13,223 | 12,923 | a) |
| R. Diggelmann | – | – | 870 | 853 | a) |
| A. Hippe | 6,970 | 6,970 | 9,370 | 8,184 | a) |
| G.A. Keller | 19,192 | 19,192 | 12,897 | 7,638 | a), b) |
| D. O'Day | 3,065 | 3 | 8,143 | 7,149 | a) |
| **Total** | **157,594** | **125,548** | **60,682** | **50,812** | |

a) Equity compensation awards: Roche Option Plan, S-SARs, RSUs and Roche Performance Share Plan.
b) Close relatives of Dr Keller held 1,100 Roche shares (2014: 1,100 Roche shares).

At 31 December 2015 members of the Corporate Executive Committee held Roche Option Plan awards (ROPs) and Stock-settled Stock Appreciation Rights (S-SARs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 156 to 191.

### ROPs and S-SARs awards held at 31 December 2015

| Year of issue | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | Total |
|---|---|---|---|---|---|---|---|---|
| S. Schwan | 59,997 | 54,453 | 71,472 | 20,000 | – | – | – | 205,922 |
| S. Ayyoubi | 18,006 | 16,338 | 21,441 | 49,161 | – | – | – | 104,946 |
| R. Diggelmann | 18,006 | 16,338 | 17,874 | 15,000 | 12,732 | 6,489 | – | 86,439 |
| A. Hippe | 24,003 | 21,783 | 28,590 | – | – | – | – | 74,376 |
| G.A. Keller | 22,503 | 20,424 | 26,805 | 20,000 | – | – | – | 89,732 |
| D. O'Day | 30,000 | 27,231 | 35,739 | – | – | – | – | 92,970 |
| **Total CEC** | **172,515** | **156,567** | **201,921** | **104,161** | **12,732** | **6,489** | **–** | **654,385** |
| Strike price (CHF) | 256.10 | 263.20 | 214.00 | 157.50 | 140.10 | 175.50 | 145.40 | |
| Expiry date | Mar. 2022 | Mar. 2021 | Mar. 2020 | Mar. 2019 | Feb. 2018 | Feb. 2017 | Feb. 2016 | |

At 31 December 2015 members of the Corporate Executive Committee held Restricted Stock Units (RSUs) as shown in the table below. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 156 to 191. RSU awards are allocated individually at the Remuneration Committee's discretion and will be vested to the recipient after three years only. Thereafter, the non-voting equity securities may remain blocked for up to ten years.

### RSU awards held at 31 December 2015

| Year of issue | 2015 | 2014 | 2013 | Total |
|---|---|---|---|---|
| S. Schwan | 5,466 | 5,551 | 7,023 | 18,040 |
| S. Ayyoubi | 1,639 | 1,665 | 2,107 | 5,411 |
| R. Diggelmann | 1,639 | 1,665 | 1,755 | 5,059 |
| A. Hippe | 2,186 | 2,220 | 2,809 | 7,215 |
| G.A. Keller | 2,049 | 2,081 | 2,633 | 6,763 |
| D. O'Day | 2,733 | 2,775 | 3,511 | 9,019 |
| **Total CEC** | **15,712** | **15,957** | **19,838** | **51,507** |

At 31 December 2015 members of the Corporate Executive Committee as shown in the table below held PSP awards from the PSP performance cycles 2014–2016 and 2015–2017. The terms and vesting conditions of these awards are disclosed in Note 26 to the Roche Group Annual Financial Statements and additional supplementary information is in the Remuneration Report included in the Annual Report on pages 156 to 191. Each award will result in between zero and two non-voting equity securities or shares (before value adjustment), depending upon the achievement of the performance targets and the discretion of the Board of Directors. After vesting, the non-voting equity securities or shares may remain blocked for up to ten years. At the end of the 2013–2015 cycle the performance targets were achieved and accordingly the participants will receive 50% of the originally targeted non-voting equity securities. The total target number of awards for the other outstanding performance cycles at 31 December 2015 are shown in the table below.

### Roche Performance Share Plan awards held at 31 December 2015

| | PSP 2015–2017 | PSP 2014–2016 |
|---|---|---|
| S. Schwan | 4,872 | 5,413 |
| S. Ayyoubi | 1,461 | 1,624 |
| R. Diggelmann | 1,461 | 1,353 |
| A. Hippe | 1,948 | 2,165 |
| G.A. Keller | 1,827 | 2,030 |
| D. O'Day | 2,436 | 2,706 |
| **Total CEC** | **14,005** | **15,291** |
| Allocation date | Feb. 2018 | Feb. 2017 |

Information relating to the number and value of rights, options and awards granted to employees of the Roche Group and members of the Board of Directors and Corporate Executive Committee of the Company are disclosed in Note 26 and Note 30 to the Roche Group Annual Financial Statements.

# Appropriation of Available Earnings

Proposals to the Annual General Meeting in CHF

| | 2015 | 2014 |
|---|---|---|
| **Available earnings** | | |
| Balance brought forward from previous year | 865,844,387 | 1,016,879,671 |
| Net profit for the year | 7,004,467,434 | 6,749,466,316 |
| **Total available earnings** | **7,870,311,821** | **7,766,345,987** |
| **Appropriation of available earnings** | | |
| Distribution of an ordinary dividend of CHF 8.10 gross per share and non-voting equity security *(Genussschein)* as against CHF 8.00 last year | (6,986,757,870) | (6,900,501,600) |
| **Total appropriation of available earnings** | **(6,986,757,870)** | **(6,900,501,600)** |
| **To be carried forward on this account** | **883,553,951** | **865,844,387** |

# Report of the Statutory Auditor to the General Meeting of Shareholders of Roche Holding Ltd, Basel

### Report of the Statutory Auditor on the Financial Statements

As statutory auditor, we have audited the accompanying financial statements of Roche Holding Ltd, which comprise the balance sheet, income statement and notes on pages 141 to 148 for the year ended 31 December 2015.

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

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

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

**Opinion.** In our opinion, the financial statements for the year ended 31 December 2015 comply with Swiss law and the company's Articles of Incorporation.

### Report on Other Legal Requirements

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

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

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

**KPMG AG**

Ian Starkey
Licensed Audit Expert, Auditor in Charge

Marc Ziegler
Licensed Audit Expert

Basel, 26 January 2016

**Published by**
F. Hoffmann-La Roche Ltd
Group Communications
4070 Basel, Switzerland
Tel. +41 (0)61 688 11 11
www.roche.com

**To order publications**
Tel. +41 (0)61 688 30 61
Fax +41 (0)61 688 41 96
E-mail: basel.webmaster@roche.com

**Media Relations**
4070 Basel, Switzerland
Tel. +41 (0)61 688 88 88
E-mail: roche.mediarelations@roche.com

**Investor Relations**
4070 Basel, Switzerland
Tel. +41 (0)61 688 88 80
E-mail: investor.relations@roche.com

**Corporate Sustainability Committee**
Tel. +41 (0)61 688 40 18
E-mail: corporate.sustainability@roche.com

**Next Annual General Meeting:**
**1 March 2016**

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

The statement regarding earnings per share growth is not a profit forecast and should not be interpreted to mean that Roche's earnings or earnings per share for 2016 or any subsequent period will necessarily match or exceed the historical published earnings or earnings per share of Roche.



Links to third-party pages are provided for convenience only. We do not express any opinion on the content of any third-party pages and expressly disclaim any liability for all third-party information and the use of it.

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

The report consists of the actual Annual Report and of the Finance Report and contains the Annual Report, the Annual Financial Statements and the Consolidated Financial Statements as per the Articles of Incorporation in the sense of a management reporting.

Printed on non-chlorine bleached, FSC-certified paper.

FSC www.fsc.org MIX Paper from responsible sources FSC® C018119

F. Hoffmann-La Roche Ltd
4070 Basel, Switzerland



www.roche.com

7 000 984