Notes to the Consolidated Financial Statements

1 General information

1.1 Corporate information

General
Crucell N.V. ('Crucell' or the 'Company') is incorporated and domiciled in Leiden, the Netherlands. Its shares are publicly traded on NYSE Euronext Amsterdam (CRXL), and SWX Swiss Exchange Zurich (CRX). Its American Depositary Shares (ADSs) are publicly traded on NASDAQ New York (CRXL). Crucell and its subsidiaries together constitute the Crucell Group, or the 'Group'. The Company has subsidiaries in the Netherlands, Switzerland, Spain, Italy, Sweden, Korea and the US. Crucell employed 1,126 people at December 31, 2008 (2007: 1,126).

Crucell is a fully integrated biopharmaceutical company, focused on developing, producing and marketing products to combat infectious diseases. Its core vaccine portfolio includes Inflexal V, a vaccine against influenza, paediatric vaccines Hepavax-Gene, Quinvaxem and MoRu-Viraten, and travel vaccines Vivotif, Dukoral, and Epaxal. In addition to these portfolio vaccines, the Group has a broad pipeline of new potential vaccines and proteins. The Group has developed various proprietary technologies such as PER.C6, MAbstract, AdVac, STAR and virosome-adjuvanted technologies. Crucell licenses these proprietary technologies to other companies in the biopharmaceutical industry.

Changes in the scope of consolidation
The consolidated financial statements include the results of the acquired companies for the period from the date of acquisition unless mentioned otherwise. There have been the following changes in the scope of consolidation in 2008.

- In November 2008, the Group sold its fully-owned subsidiary Etna Biotech Srl (Catania, Italy) to Zydus Cadila (Ahmedabad, India). The sale resulted in net proceeds for Crucell of € 182;
- In December 2008, SBL Vaccin Holding AB and Vitec AB legally merged into SBL Vaccin AB;

On November 30, 2007, Rhein Vaccines B.V. legally merged into Berna Rhein B.V. and ceased to exist as of that date.

In 2006, the most significant changes in the scope of consolidation were due to:

- The acquisition of the shares of Berna Biotech AG (February 2006);
- The establishment of Crucell Vaccines Inc. followed by the acquisition of the assets and liabilities of Berna Products Corporation (October 2006); and
- The acquisition of the shares of SBL Vaccin Holding AB (November 2006).

Further details on these acquisitions are provided in note 5.8.

List of consolidated companies

The Company's most significant subsidiaries as of December 31, 2008 were:

Name	Legal seat ownership	Country	2008 ownership	2007 ownership	2006 ownership
Crucell Holland B.V.	Leiden	the Netherlands	100%	100%	100%
U-BiSys B.V.	Utrecht	the Netherlands	100%	100%	100%
ChromaGenics B.V.	Amsterdam	the Netherlands	100%	100%	100%
Berna Biotech AG	Bern	Switzerland	100%	100%	100%
Berna Biotech España SA	Madrid	Spain	100%	100%	100%
Berna Biotech Italia Srl	Milano	Italy	100%	100%	100%
Etna Biotech Srl	Catania	Italy	—	100%	100%
Berna Rhein B.V.	Leiden	the Netherlands	100%	100%	100%
Rhein Vaccines B.V.	Maastricht	the Netherlands	—	—	100%
Berna Biotech Korea corp.	Seoul	Korea	100%	100%	100%
Crucell Holding Inc.	Wilmington, DE	United States	100%	100%	100%
Crucell Vaccines Inc.	Wilmington, DE	United States	100%	100%	100%
Crucell Biologics Inc.	Wilmington, DE	United States	100%	100%	100%
SBL Vaccin Holding AB	Stockholm	Sweden	—	100%	100%
SBL Vaccin AB	Stockholm	Sweden	100%	100%	100%
Vitec AB	Stockholm	Sweden	—	100%	100%

Joint venture and associated companies (not consolidated)

Name	Joint venture/ associate ownership	Legal seat ownership	Country	2008 ownership	2007 ownership	2006 ownership
Percivia LLC	Joint venture	Cambridge, MA	United States	50.0%	50.0%	50.0%
ADImmune corp.	Associated company	Taipei	Republic of China	11.8%	20.0%	—
Kenta Biotech AG *	Sold	Bern	Switzerland	—	22.0%	37.0%
Pevion Biotech AG **	Sold	Bern	Switzerland	—	—	50.0%

* On July 3, 2008 the Group sold all of the 2,625,000 shares it owned in Kenta Biotech AG to Ingro Finanz AG.

** On November 5, 2007 the Group sold all shares it owned in Pevion Biotech AG to other shareholders of Pevion Biotech.

1.2 Basis of preparation

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the IASB and are prepared on a historical cost basis unless stated otherwise. As the Group adopted IFRIC 14 there are no differences between IFRS applied by the Group and IFRS as endorsed by the EU.

As permitted by article 362 of Book 2 of the Netherlands Civil Code, the company financial statements have been prepared applying the same IFRS accounting policies as used in the consolidated financial statements. In conformity with article 402, Book 2 of the Dutch Civil Code, the Company income statement is presented in abbreviated form.

The consolidated financial statements for the year ended December 31, 2008 on form 20-F were authorized for issue in accordance with a director's resolution on April 17, 2009.

Foreign currency translation
The functional and presentation currency of the Company is the Euro. All values are rounded to the nearest thousand (€ 000) unless indicated otherwise.

Each entity in the group determines its own functional currency based on the primary economic environment in which the entity operates. Items included in the financial statements of each entity are measured using that functional currency. Transactions in foreign currencies are initially recorded in the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange ruling at the balance sheet date. All differences are taken to the income statement. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

At the reporting date, the assets and liabilities of subsidiaries with different functional currencies are translated into Euro at the rate of exchange ruling at the balance sheet date and their income statements and cash flow statements are translated into Euro at the weighted average exchange rates for the year. The exchange rate differences arising on the translation are taken directly to the translation reserve, a separate component of equity.

1.3 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries per December 31 and for the period then ended. The financial statements of the subsidiaries are prepared for the same reporting year as the Group, using consistent accounting policies. All intra-group balances and transactions are eliminated in full.

Subsidiaries
Subsidiaries are entities controlled by the Company. Control is achieved where the Company has the power to govern the financial and operational policies of an enterprise so as to obtain benefits from its activities. Subsidiaries are fully consolidated from the date of acquisition, which is the date on which the Group obtains control, and continue to be consolidated until the date such control ceases.

Minority interests represent the portion of profit or loss for the year and net assets at the end of the year not held by the Group and are presented separately in the consolidated income statement and within equity in the consolidated balance sheet, separately from the equity attributable to equity holders of the parent.

Joint ventures
A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity that is subject to joint control. A jointly controlled entity is a joint venture that involves the establishment of a separate entity in which each venturer has an interest. The Group recognizes its interest in joint ventures using the equity method. Under the equity method, the investment in the joint venture is carried in the balance sheet at cost plus post-acquisition changes in the Group's share of net assets of the joint venture. The income statement reflects the share of the results of operations of the joint venture. Periodically the Group determines whether it is necessary to recognize an impairment loss with respect to the Group's net investment in the joint venture. The reporting dates of the joint ventures are the same as those of the Group and the accounting policies of the joint ventures conform to those used by the Group.

Associates
The Group's investments in associates are accounted for under the equity method of accounting and are initially recognized at cost. An associate is an entity in which the Group has significant influence and which is neither a subsidiary nor a joint venture. The reporting dates of the associates are the same as those of the Group and the associates' accounting policies conform to those used by the Group.

1.4 Use of estimates and judgments

The preparation of financial statements requires Management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected. In particular, information about significant areas of estimation uncertainty and use of critical judgments in applying accounting policies that have the most significant effect on the amount recognized in the financial statements are described below.

Revenue recognition
Sales transactions concluded by the Group may be complex as the underlying sales agreements can contain multiple components whose accounting treatment may be affected by the other components. Reviewing these agreements requires due care and a degree of management's judgment. Revenue is not recognized before it is assessed that significant risks and rewards of ownership have been transferred and that the Group retains no continuing managerial involvement or effective control over the goods sold. For some transactions this can result in cash receipts being initially recognized as deferred income and then released to income over subsequent periods on the basis of the performance of the conditions specified in the agreement. The Group is also subject to various licensing agreements that contain milestones that may only be recognized if they are 'substantive'. Determining whether a milestone is substantive also requires management judgment.

Valuation of deferred tax assets and liabilities
Determination of income taxes in jurisdictions in which the Group operates, requires exercising judgment. This involves estimating the actual current tax exposure together with assessing the valuation of carry forward losses and temporary differences. The temporary differences mainly relate to intangible assets, property, plant and equipment, inventories and pension assets.

In assessing the valuation of the deferred tax assets and liabilities the following items are considered: the future taxable profit projections, historical results, tax planning strategies, changes (substantially) enacted in tax laws and the specific timing of the recovery of deferred tax positions. In the event that actual results differ from these estimates due to future changes in income tax law or after final review of our tax returns by tax authorities, the Group may need to adjust the valuation of our deferred tax assets and liabilities, which could materially impact the financial position and results of operations. Management believes that the estimates are reasonable.

As at December 31, 2008, the Group had unrecognized tax carry forward losses of € 172,732 (2007: € 254,511, 2006: € 222,338) that are available, with certain restrictions in time, for offset against future taxable profits of the companies in which the losses arose. Management assessed the likelihood that the carry forward losses will be recovered from future taxable profit. To the extent Management believes that recovery is probable, a deferred tax asset was recognized, which at December 31, 2008 was € 9,060 (2007: € 678, 2006: € 749). To the extent the likelihood of recovery of deferred tax assets changes, an expense or a gain within the tax charge in our income statement for the relevant period will be included.

Accounting for business combinations
Business combinations are accounted for using the purchase method. This involves recognizing identifiable assets (including previously unrecognized intangible assets) and liabilities (including contingent liabilities) of the acquired business at the estimated fair values at acquisition date. Judgments, made in identifying and valuating assets and liabilities assumed in a business combination and in determining the useful life of any acquired assets, can significantly affect both current period as future periods operating results. Estimated fair values in a business combination are based on information available at the date that the purchase price allocation is completed. Assets and liabilities may be adjusted or recognized retrospectively within the period of one year if management receives additional information about facts and circumstances that existed at the acquisition date.

Goodwill is measured as the excess of the total consideration over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. Goodwill includes intangible assets that were identified in a business combination, but not valued separately because the assets were either not separable or could not be measured reliably. Assets identified and included as part of goodwill can be specific customer relationships, supply contracts not meeting the recognition requirements or the workforce acquired. Goodwill recognized can significantly affect both current period as future periods operating results as goodwill is subject to an annual impairment review and not to periodical amortization.

Goodwill at December 31, 2008 amounted to € 46,076 compared to € 44,377 at the end of 2007. Goodwill increased due to a strengthening of the foreign currencies underlying the investment in the foreign operations. The increase is mainly caused by the appreciation of the Swiss Franc and the US Dollar against the Euro in 2008.

Impairment reviews of property, plant and equipment, intangible assets and goodwill
An asset's recoverable amount is the higher of the asset's fair value less costs to sell and its value in use. For goodwill, the recoverable amount is tested at the level of the cash generating unit. The Group starts its impairment reviews of property, plant and equipment, intangible assets and goodwill by determining the asset's (or cash generating unit's) recoverable amount based on the fair value less costs to sell of an asset. If the fair value less costs to sell does not exceed the carrying amount, the Group will also consider the value in use before an asset is impaired. The best evidence of an asset's fair value less costs to sell is a price in a binding sale agreement in an arm's length transaction, adjusted for incremental costs that would be directly attributable to the disposal of the asset. However for most of the Group's assets there are typically no observable market prices as the assets have a level of specificity for which no active market exists. The fair values less costs to sell are predominantly based on discounted net present value calculations that use assumptions applicable in the current market. Key assumptions are those regarding the discount rates, the estimated terminal growth rate, expected changes to market share and the selling prices and costs in the forecasted period. Where applicable, the forecasted cash flows for pre-clinical programs are adjusted for the risk of failure of the program.

Property, plant and equipment and intangible assets
The Group assesses for its property, plant and equipment and intangible assets at each reporting date whether there is an indication that an asset may be impaired. If there is such an indication of impairment or when an annual impairment test for an asset is required, an impairment test is performed.

In the year ended December 31, 2006, an impairment loss of € 19,568 was recognized for two buildings, including installed equipment, that were acquired in the business combination with Berna Biotech AG. Both buildings are located in Switzerland. Berna Biotech AG performed contract manufacturing and conducted a candidate vaccine development program in those buildings. The development of the candidate vaccine and the contract manufacturing were phased out during 2007. The buildings are specially configured for biotechnology purposes and it is impracticable to separate the equipment from the buildings. Since at the time there was no direct use for these buildings for any of the Group's other activities, no market for the sale of the buildings to third parties and no expectation that these buildings could be utilized in the foreseeable future, an impairment was recorded for the total carrying amount of € 19,568 as at December 31, 2006.

In the fourth quarter of 2006 an impairment loss of € 10,848 was recognized on the in-process research and development of the Tetra vaccine which was acquired in February 2006 when the Company acquired Berna Biotech AG. Management decided to stop the development of Tetra after Quinvaxem received approval by the WHO. Consequently, the carrying value of Tetra was impaired for the total amount of € 10,848.

An impairment loss recognized in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. In the first quarter of 2008, the Group entered into an exclusive agreement with Wyeth Pharmaceuticals. The Group develops and manufactures certain components of a vaccine for use by Wyeth in clinical studies. The contract manufacturing takes place in one of the two buildings that was impaired in 2006, as discussed above. The Group reassessed the recoverable amount of the asset and reversed € 5,219 of the previously recognized impairment loss in the 2008 financial statements.

In the fourth quarter of 2008, the Group also recognized an impairment charge of € 331 for the animal housing facility in Bern, Switzerland, that is no longer in use.

Goodwill
Goodwill is reviewed annually or more frequently when changes in circumstances indicate that the carrying amount may be impaired. The discounted net present value calculations are derived from the Group's most recent long range plan, which forecasts the period for the next five years. Beyond this five year window, cash flows are extrapolated based on the estimated terminal growth rate.

Management exercised judgment in determining the segments and the subsequent allocation of the goodwill. In 2008, the Group reorganized its reporting structure in a way that changes the composition of one or more cash-generating units to which goodwill has been allocated, as the Vaccines and Proteins business units were integrated. In the prior year, all goodwill was allocated to the Vaccines Unit. As a result of the change in composition, Management had to reallocate the goodwill and decided to assign all goodwill to the 2006 business acquisitions that led to the recognition of the goodwill. Management decided not to allocate the goodwill to the individual business acquisitions as the operations are integrated and the allocation would be arbitrary.

Valuation of defined benefit plans
Under defined benefit plans, the pension entitlements are calculated using the projected unit credit actuarial method. The pension liability recognized in the balance sheet is the present value of the defined benefit obligation at the balance sheet date, less the fair value of the plan assets after adding or subtracting unrecognized actuarial gains or losses and past-service costs.

The defined benefit obligation is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value and any unrecognized past service costs and the fair value of any plan assets are deducted.

The weighted average of the principal assumptions used in determining the employee benefit obligations for the defined benefit plans of the Group are shown below:

	2008	2007	2006
Discount rate	**3.37%**	3.40%	3.32%
Expected return on plan assets	**4.53%**	4.53%	4.55%
Future salary increases	**1.19%**	1.22%	1.19%
Future pension increases	**0.71%**	0.78%	0.66%

Share based payments
Option plans
The Company operates share-based payment programs, whereby in consideration for equity instruments both employees and non-employees render services.

The cost of equity-settled share-based option programs are measured by reference to the fair value at the date on which they are granted. The Company accounts for its stock options under the fair value method. The following weighted average assumptions were used in determining the fair value of the stock options.

Year ended December 31,	2008	2007	2006
Risk-free interest rate	4.3%	4.1%	3.6%
Expected dividend yield	–	–	–
Expected volatility	36.7%	33.3%	41.8%
Expected life (years)	4.76	4.25	4.25

Expected volatilities are based on historical volatilities of the Company's stock measured over a period commensurate with the expected term of the grants. The expected term used is based on the anticipated exercise behavior. Dividend yields used are based on historical information as to dividends declared by the Company. Risk-free interest rates used are equal to the implied yield available on zero-coupon Dutch government bonds with a remaining term equal to the expected term of the share-based instrument.

Some of our share-based option programs include specific market-based conditions that are estimated at the time of the grant, as IFRS 2 does not allow updates to the original estimate for market-based conditions during the vesting period. Estimates of market based conditions that have an effect on the fair values of any shares or options allocated in our share based payment plans are share price growth on the stock markets and our Total Shareholder Return ('TSR') compared to a index of biotech companies. TSR reflects the return received by a shareholder, taking into account both the change in share price and dividends received, while assuming dividends are re-invested in the Company.

Recognition of provisions for litigations and claims
Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Management uses judgment in determining the provision for litigations and exposure to contingent liabilities related to pending litigation or other outstanding claims. Judgment is used in assessing the likelihood that a pending claim will succeed or a liability will arise and in quantifying the possible range of the final settlement.

The Group is subjected to (potential) lawsuits and other legal proceedings, resulting from the ordinary course of business. The current status of pending proceedings has been reviewed with legal counsel. Upon consideration of known relevant facts and circumstances, provisions were recognized for losses that are considered to be more likely than not and that can reasonably be estimated as of the balance sheet date.

Valuation of inventories
Inventories are stated at the lower of cost and net realizable value. Management exercises judgment in determining the allowance for obsolete inventory. Inventories are usually written down to net realizable value item by item. In some circumstances, however, it may be appropriate to group similar or related items. In these cases, the Group considers numerous items, which include test results by quality control, review by local supply chain, historic scrapping and rejection percentages per product and the current product portfolio. The allowance recognized in 2008 is € 3,218 (2007: € 6,428).

1.5 Changes in accounting policies

1.5.1 New adopted accounting policies in the financial year 2008

IFRIC 14, 'IAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interactions', as issued by the IASB is effective in periods beginning on or after January 1, 2008.
This interpretation is endorsed by the EU with the change that it should be applied at the latest, as from the commencement date of its first financial year starting after 31 December 2008. The difference in the effective date would for the Group cause a difference in equity and results between IFRS as issued by the IASB and IFRS as endorsed by the EU. Foreign private issuers that are unable to assert compliance with IASB-issued IFRS have to reconcile their financial information to US GAAP. To avoid a mandatory reconciliation between IFRS as endorsed by the EU and US GAAP, the Group adopted IFRIC 14 effective as of January 1, 2008.

The interpretation provides guidance on assessing the limit of the surplus in a defined benefit pension fund that can be recognized as an asset. It also explains how the pension asset or liability may be affected by a statutory or contractual minimum funding requirement. The pension fund in Switzerland has a minimum funding requirement with economic benefits from overfunding being available as a reduction of future contributions. The application of the interpretation results in an increase in the assets recorded on the Group's balance sheet and a corresponding increase in the Group's equity.

As required by the transition provisions of IFRIC 14, the Group has applied the revised standard retrospectively as of the beginning of the first period presented in the first financial statements to which the interpretation applies. The impact on the December 31, 2008, 2007 and 2006 consolidated balance sheets and the consolidated income statements are as follows:

In thousands of Euro

	2008			2007			2006		
	Before IFRIC 14	Impact	IFRIC 14 adopted	Before IFRIC 14	Impact	After retrospective application	Before IFRIC 14	Impact	After retrospective application
Income statement									
Gross margin	121,402	—	121,402	68,902	—	68,902	41,078	—	41,078
Operating expenses	(132,367)	2,676	(129,691)	(129,787)	3,869	(125,918)	(148,341)	467	(147,874)
Profit (loss) before tax	3,600	2,676	6,276	(48,987)	3,869	(45,118)	(98,116)	467	(97,649)
Income Tax	8,885	(575)	8,310	3,040	(832)	2,208	10,551	(100)	10,451
Profit/(loss) for the year	**12,485**	**2,101**	**14,586**	**(45,947)**	**3,037**	**(42,910)**	**(87,565)**	**367**	**(87,198)**
Balance sheet									
Pension asset recognized	759	7,853	8,612	2,479	4,918	7,397	2,555	746	3,301
Deferred tax liabilities	(15,297)	(1,688)	(16,985)	(28,210)	(1,057)	(29,267)	(33,586)	(160)	(33,746)
Equity attributable to equity holders of the parent	(447,327)	(6,165)	(453,492)	(437,242)	(3,861)	(441,103)	(497,300)	(586)	(497,886)
Profit (loss) per share – basic	**0.21**	**0.01**	**0.22**	**(0.71)**	**0.05**	**(0.66)**	**(1.53)**	**0.01**	**(1.52)**
Profit (loss) per share – diluted	**0.21**	**0.01**	**0.22**	**(0.71)**	**0.05**	**(0.66)**	**(1.53)**	**0.01**	**(1.52)**

The following standard was not yet effective at December 31, 2008, but has been early adopted by the group:

- IFRS 8, 'Operating segments' (effective from January 1, 2009). IFRS 8 replaces IAS 14 'Segment reporting' and aligns segment reporting with the requirements of the US standard SFAS 131, 'Disclosures about segments of an enterprise and related information'. The new standard requires a 'management approach', under which segment information is presented on the same basis as that used for internal reporting purposes. The Group applies IFRS 8 from January 1, 2007. The impact of the early adoption is described in note 4 'Segment information'.

1.5.2 Other new accounting pronouncements

The following amendments to existing standards and interpretations were not yet effective at the balance sheet date and were not early adopted by the Group:

- IAS 23 (Amendment), 'Borrowing costs' (effective from January 1, 2009). The amendment requires an entity to capitalize borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset (one that takes a substantial period of time to get ready for use or sale) as part of the cost of that asset. The option of immediately expensing those borrowing costs will be removed. The Group will apply IAS 23 (Amended) from January 1, 2009, but adoption will have no impact on the Group's financial statements as borrowing costs directly attributable to qualifying assets are already capitalized in line with the allowed alternative treatment of IAS 23.
- IAS 1 (Revised), 'Presentation of financial statements (effective from January 1, 2009). The revised standard will prohibit the presentation of items of income and expenses (that is, 'non-owner changes in equity') in the statement of changes in equity, requiring 'non-owner changes in equity' to be presented separately from owner changes in equity. All non-owner changes in equity will be required to be shown in a performance statement, but entities can choose whether to present one performance statement (the statement of comprehensive income) or two statements (the income statement and statement of comprehensive income). The Group will apply IAS 1 (Revised) from January 1, 2009.
- IFRS 2 (Amendment), 'Share-based payment' (effective from January 1, 2009). The amended standard deals with vesting conditions and cancellations. It clarifies that vesting conditions are service conditions and performance conditions only. Other features of a share-based

payment are not vesting conditions. These features would need to be included in the grant date fair value for transactions with employees and others providing similar services; they would not impact the number of awards expected to vest or valuation thereof subsequent to grant date. All cancellations, whether by the entity or by other parties, should receive the same accounting treatment. The Group will apply IFRS 2 (Amendment) from January 1, 2009 and currently assesses the impact of the amended standard.
- IFRS 3 (Revised), 'Business combinations' (effective from July 1, 2009). The revised standard continues to apply the acquisition method to business combinations, with some significant changes. For example, all payments to purchase a business are to be recorded at fair value at the acquisition date, with contingent payments classified as debt subsequently re-measured through the income statement. There is a choice on an acquisition-by-acquisition basis to measure the non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets. All acquisition-related costs should be expensed. The Group will apply IFRS 3 (Revised), 'Business combinations' from January 1, 2010 and currently assesses the impact of the amended standard.
- IAS 36 (Amendment), 'Impairment of assets' (effective from January 1, 2009). The amendment is part of the IASB's annual improvements project published in May 2008. Where fair value less costs to sell is calculated on the basis of discounted cash flows, disclosures equivalent to those for value-in-use calculation should be made. The Group will apply the IAS 36 (Amendment) and provide the required disclosure where applicable for impairment tests from January 1, 2009.

Not all amendments to existing standards and interpretations that are not yet effective and not early adopted by the Group have been listed above as they may not be applicable to the operations of the Group or are not likely to have a significant impact on the financial statements of the Group. The Group currently assesses in detail the impact of the amendments and interpretations.

2 Summary of significant accounting policies

2.1 Revenue recognition

General

In general, revenue is recognized to the extent that it is probable that the economic benefits will flow to the Group and the amount of revenue and the costs (to be) incurred in the transaction can be measured reliably. Revenue is measured at the fair value of the consideration received excluding discounts, rebates, value added taxes and duties.

Revenues are recognized on a gross basis when the Group acts as the principal in an arrangement, and recognized on a net basis when the Group acts as agent.

Goods or services traded for items of a similar nature are not regarded as transactions that generate revenue. Goods or services traded for dissimilar items are regarded as transactions that generate revenue.

Product sales

Revenue from product sales is recognized when:

- Significant risk and rewards of ownership of the products have passed to the buyer;
- The Group does not retain either managerial involvement to the degree usually associated with ownership or effective control over the goods sold;
- The amount of revenue and the costs (to be) incurred in the transaction can be measured reliably; and
- It is probable that the economic benefits associated with the transaction will flow to the Group.

Products could include a specific right to return, either pursuant to the sales contract or local law. Revenue from that sale is recognized at time of sale only if all of the following conditions are met in addition to the general revenue recognition terms described above:

- The customer is obligated to pay and that obligation is not contingent on resale of the product;
- The customer's obligation to pay will not be changed in the event of theft or physical destruction or damage of the product;

- The customer acquiring the product for resale has economic substance apart from that provided by the Group, e.g. the customer sells other products besides the products the Group delivers to it;
- The Group does not have significant future performance obligations to directly ensure resale of the product by the buyer; and
- The amount of future returns can be reasonably estimated.

Revenue and cost of sales that are not recognized at the time of the sale because the foregoing conditions were not met are recognized on the earlier of either the substantial expiration of the customer's right to return the product or the subsequent satisfaction of those conditions.

License revenues
The Group recognizes initial fees to the licensing of the technology as revenues over the period of the significant continuing performance obligations, if any, and upon transfer of the significant risks and rewards to the buyer.

Under certain arrangements, the Group has no continuing performance obligations after delivery of the associated technology under the license agreement or any other arrangement with the licensee. In such arrangements, initial license fees are recognized as revenue when significant risks and rewards pass to the buyer, which is the moment the transfer of developed technology is completed. The Group's arrangements provide for continuing support of its technology at standard consulting rates. Revenues derived from consulting services that are not essential to licensee's ability to use the Group's technology, are recognized as earned during the period that the consulting services are performed.

In certain arrangements, the Group collaborates with third parties to develop novel products or processes using its proprietary technology. These arrangements generally include an initial license fee upon the delivery of the proprietary technology and additional fees for providing ongoing research and development activities. The research and development activities performed are substantive and critical to the licensees' exploitation of the delivered technology. When significant risks and rewards pass to the buyer, initial fees from these arrangements are recognized as revenues over the period of continuing performance obligations. Additional fees from research and development activities are recognized as revenues earned over the period of the development collaboration or the manufacturing obligation. All fees received under collaboration agreements are non-refundable.

Certain of the Group's license agreements provide for additional non-refundable fees to be paid to the Group upon the achievement of milestones by the licensee. These milestone payments may be included in license agreements regardless of whether the Group has continuing performance obligations under a particular agreement.

For license agreements where there are no continuing performance obligations, milestone revenue is recognized when those amounts become due and payable upon achievement of the milestone. The licensee has to confirm the achievement of a milestone in writing before the revenue is recognized.

The Group also has license agreements with continuing performance obligations. License revenues from the achievement of these research and development milestones, if deemed substantive (as described below), are recognized as revenue when the milestones are achieved, and the milestone payments are due and collectible under the terms of the agreement.

Milestones are considered 'substantive' if all of the following conditions are met:

- The milestone payments are non-refundable under the terms of the agreement;
- Achievement of the milestone involved a degree of risk and was not reasonably assured at the inception of the arrangement;
- Substantial effort is involved in achieving the milestone;
- The amount of the milestone payment is reasonable in relation to the effort expended or the risk associated with achievement of the milestone; and
- A reasonable amount of time passed between the upfront license payment and the first milestone payment as well as between each subsequent milestone payment.

If any of these conditions are not met, the Group would recognize the proportionate amount of the milestone payment upon receipt as revenue that corresponds with the percentage of work already completed. The remaining portion of the milestone payment would be deferred and recognized as revenue as performance obligations are completed.

In addition to the initial fee, the Group's arrangements generally provide that the licensee makes semi-annual or annual payments (called 'license maintenance fees') to maintain the license for a subsequent term. Generally, licensees may terminate the license and related maintenance fees upon 30 to 90 days' notice. License maintenance fees are recognized as revenues when the amounts become fixed and payable. The aggregate of license maintenance fees paid are generally deductible from any earned royalty payments which may be due on future product sales of the licensee, if any, under the license agreement. Royalties are recognized as revenue when they become fixed and payable.

Service fees
As part of various collaboration agreements, the Group receives service fees for work performed under such agreements. The Group does not retain the residual interest on products developed under the agreements and will normally not have ownership of intellectual property rights on these products. Revenues and related costs associated with completing performance services are recognized when the service is completed and the collectibility of the receivable is deemed probable. Revenues associated with time and material performance contracts are recognized when the costs incurred and the costs to complete the transaction can be measured reliably.

2.2 Cost of product sales and cost of service fees

Cost of product sales and cost of service fees both comprise direct labor, materials and overhead costs, incurred in performing work under various collaboration agreements that directly relate to revenues earned.

2.3 Other operating income

Government grants
The Group receives certain government grants that support research efforts in defined projects. These grants generally provide for reimbursement of approved costs incurred as defined in various grants. Income associated with these grants is recognized when costs under each grant are incurred in accordance with the terms and conditions of the grant and the collectibility of the receivable is deemed probable and there is reasonable assurance that attaching conditions will be achieved. Where the grant relates to an expense item, it is recognized as income over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate.

Other income
Other income mainly consists of the reimbursement of development costs and funding by non-governmental agencies, but also includes non-core business transactions such as the sale of property, plant and equipment and income generated from training courses.

2.4 Research and Development expenses

Expenditure on research activities is recognized as an expense in the period in which it is incurred. Internally generated intangible assets arising from the Group's development activities are recognized if all of the recognition criteria for internally generated intangible assets are met, including:

- An asset is created that can be identified;
- It is probable that the asset created will generate future economic benefits; and
- The development cost of the asset can be measured reliably.

Product registration fees will, in principle, meet these recognition requirements. Where no internally generated intangible asset can be recognized, development expenditure is recognized as an expense in the period in which it is incurred. Research and development expenses consist of personnel expenses, laboratory expenses, technology purchases, patent related fees, technology license fees, depreciation and amortization of tangible and intangible assets related to research and development, and lease expenses for lab space and equipment leases. Research and development expenses also include fees paid to third parties who conduct research on behalf of the Group.

2.5 Taxes

Current tax
Current tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the tax authorities. The tax rates and tax laws used to compute the amount are those that are enacted, or substantially enacted, at the balance sheet date. Current income tax relating to items recognized directly in equity is recognized in equity and not in the income statement. Current tax assets and current tax liabilities are offset, if a legally enforceable right exists to offset the recognized amounts and the Group intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

Deferred tax
Deferred income tax is calculated using the asset and liability method on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their carrying amounts under IFRS. Deferred tax liabilities are recognized for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; and
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognized for all deductible temporary differences and carry-forwards of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forwards of unused tax credits and unused tax losses, can be utilized.

The unrecognized deferred income tax assets are reassessed at each balance sheet date and are recognized to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered. Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted at the balance sheet date.

Income tax relating to items recognized directly in equity is recognized in equity and not in the income statement. Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

2.6 Profit/ (loss) per share

Basic net profit/ (loss) per share is computed based on the weighted average number of ordinary shares outstanding during the period. Diluted net profit/ (loss) per share is computed based on the weighted average number of ordinary shares outstanding, including the dilutive effect of stock options, if any.

2.7 Cash and cash equivalents

Cash and cash equivalents include cash in hand and all highly liquid investments with maturities of three months or less that are convertible to a known amount of cash and bear an insignificant risk of change in value.

2.8 Financial assets

The Group classifies its financial assets in the following categories: at fair value through profit or loss, loans and receivables, and available for sale. The Group has no held-to-maturity investments. The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition.

Financial assets at fair value through profit or loss
Financial assets at fair value through profit or loss are financial assets held for trading. A financial asset is classified in this category if acquired principally for the purpose of selling in the short-term. Derivatives are also categorized as held for trading unless they are designated as formal hedges. Assets in this category are classified as current assets.

Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that

are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after the balance sheet date. These are classified as non-current assets. The Group's loans and receivables comprise cash and cash equivalents, trade accounts receivable, other financial assets and other current assets in the balance sheet.

Trade accounts receivable, other current assets and other financial assets
Trade accounts receivable, other current assets and other financial assets are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method, less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the group will not be able to collect all amounts due according to the original terms of the receivables.

Available-for-sale financial assets
Available-for-sale investments are those non-derivative financial assets that are designated as available-for-sale. After initial measurement, available-for-sale financial assets are measured at fair value with unrealized gains or losses being recognized directly in equity in the net unrealized gains reserve. When the investment is disposed of, the cumulative gain or loss previously recorded in equity is recognized in the income statement. Available-for-sale investments are included in non-current assets unless management intends to dispose of the investment within 12 months of the balance sheet date.

Derecognition of financial assets
A financial asset is derecognized when:

- The rights to receive cash flows from the asset have expired;
- The Group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass through' arrangement; or
- The Group has transferred its rights to receive cash flows from the asset and either has transferred substantially all the risks and rewards of the asset, or has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

2.9 Derivative financial instruments and hedging

Derivative financial instruments are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured at fair value. The fair value is based on the market prices of the instruments. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative. To the extent that no formal hedge accounting is applied, any gains and losses arising from changes in the fair value of the instruments are recognized in the income statement during the period in which they arise.

The Group applies formal hedge accounting for specific forward derivative instruments that are designated as cash flow hedges. At the inception of derivative instruments, the relationship between the derivative and the underlying financial instrument, as well as the objective of the risk management and the strategy for undertaking transactions are documented. In the documentation it is also stated whether the hedge relationship is expected to be highly effective (prospective and retrospective) and how the effectiveness is tested.

Changes in the fair value of a highly effective derivative, that is designated and qualifies as a cash flow hedge, are recorded in equity for the effective part, until the profit or loss is affected by the variability in cash flows of the designated hedged item. The ineffective part of the cash flow hedge is recognized in the income statement.

2.10 Inventories

Inventories are stated at the lower of cost or net realizable value. The cost of inventories includes expenditures for materials acquired, directly attributable costs and related production overhead expenses. Net realizable value is determined using the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale. Allowances are made for obsolete inventory.

2.12 Property, plant and equipment

Property, plant and equipment is stated at cost, excluding the costs of day-to-day servicing, less accumulated depreciation and accumulated impairment in value. The cost of replacing a part of a plant or equipment is capitalized if the recognition criteria are met. Where an item of property, plant and equipment comprises major components having different useful lives, they are accounted for as separate items of property, plant and equipment. Depreciation is charged to the income statement on a straight-line basis over the estimated useful life of the assets:

- Freehold land is not depreciated;
- Buildings: 20 to 50 years;
- Computer equipment: three years;
- Furniture and laboratory equipment: five years; and
- Leasehold improvements: the shorter of the lease term and ten years.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected from its use. Any gain or loss arising on derecognition of the asset is included in the income statement. The asset's residual values, useful lives and methods are reviewed, and adjusted if appropriate, at each financial year-end.

Borrowing costs
Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are added to the cost of these assets until they are substantially ready for their intended use. Qualifying assets are those assets that necessarily take a substantial period of time to be completed for their intended use. All other borrowing costs are recognized as an expense in the income statement when incurred.

2.13 Intangible assets

Intangible assets acquired are measured at cost on initial recognition. The cost of intangible assets acquired in a business combination is the fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangible assets are not capitalized if the recognition requirements are not met, in which case the expenses associated with generating the intangible asset are recognized in the income statement. The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortized over their useful lives. The amortization period and the amortization method are reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortization period or method, and treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the income statement consistent with the function of the intangible asset.

The estimated useful life of the assets is as follows:

- Patents and licenses: one year to 20 years;
- Customer lists: three years;
- Developed technology: five years to 20 years; and
- In-process R&D is not depreciated until completion of the asset.

2.14 Goodwill and business combinations

Business combinations are accounted for using the purchase method. This involves recognizing identifiable assets (including previously unrecognized intangible assets) and liabilities (including contingent liabilities, but excluding future restructuring) of the acquired business at fair value. Goodwill acquired in a business combination is initially measured at cost, which is the excess of the cost of the business combination over the Group's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities. Following initial recognition, goodwill is measured at cost less accumulated impairment losses.

Goodwill includes intangible assets that were identified in a business combination, but not valued separately because the assets were either not separable or could not be measured reliably. Assets identified and included as part of goodwill can be specific customer relationships or supply contracts not meeting the requirements for separate recognition and the workforce acquired.

Assigning fair values to the assets and liabilities acquired in a business combination inherently requires the use of estimates. Under IFRS 3 Business Combinations, these fair values can be adjusted up to one year after the acquisition date, which can affect the amount recognized as goodwill.

Goodwill acquired in a business combination is allocated from the acquisition date to each of the Group's cash-generating units that are expected to benefit from the synergies of the combination, irrespective of whether other assets or liabilities of the Group are assigned to those units or groups of units.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and, if necessary, translated into Euro at the rate of exchange ruling at the balance sheet date.

2.15 Impairment of non-financial assets

The Group assesses non-financial assets at each reporting date to determine whether there is an indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of the asset's fair value less costs to sell and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

An impairment loss recognized in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. If this is the case, the carrying amount of the asset shall be increased to its recoverable amount, but so that the increased carrying amount does exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years.

Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that the carrying value may be impaired. Impairment is determined for goodwill by assessing the recoverable amount of the cash-generating unit to which the goodwill has been allocated. Where the recoverable amount of the cash-generating unit is less than the carrying amount of the cash-generating unit to which goodwill has been allocated, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

2.16 Employee benefits

Pensions
The Group operates both defined benefit plans and defined contribution plans. For defined contribution plans, obligations for contributions are recognized as an expense when they are due. The Group has no obligation to pay further contributions into a defined contribution plan if the fund does not hold sufficient assets to pay all plan benefits.

Under defined benefit plans, the pension entitlements are calculated using the projected unit credit actuarial method. The pension liability recognized in the balance sheet is the present value of the defined benefit obligation at the balance sheet date, less the fair value of the plan assets after adding or subtracting unrecognized actuarial gains or losses and past-service costs.

The defined benefit obligation is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value and any unrecognized past-service costs and the fair value of any plan assets are deducted. For each plan the recognized assets are limited to the net total of any cumulative unrecognized net actuarial losses and past-service costs and the present value of any future refunds from the plan or reductions in future contributions to the plan (the 'asset ceiling'). The economic benefit available as a reduction in future contributions is determined as the present value of the estimated future service cost in each year less the estimated minimum funding contributions required in respect of the future accrual of benefits in that year. Actuarial gains and losses in excess of a threshold of the higher of 10% of the pension liabilities and 10% of the fair value of the plan assets are charged or credited to the income statement over the employees' expected average remaining working lives.

Share-based payment transactions
Stock option plans
The Group operates a number of equity-settled, share-based compensation plans, under which the Group receives services from employees as consideration for equity instruments (options) of the Group. The cost of equity-settled transactions with employees is measured by reference to the fair value at the date on which the options are granted.

The maximum amount to be expensed is determined by reference to the fair value of the options granted, excluding the impact of any non-market service and performance vesting conditions. The impact of market conditions on the fair value of options under these plans is estimated on the date of grant using a lattice-based option valuation model. The model calculates the likelihood of achievement of the market-based measures at various levels.

Non-market vesting conditions are included in assumptions about the number of options that are expected to vest. The cost of equity-settled transactions is recognized, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award ('the vesting date'). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The income statement charge or credit for a period represents the movement in cumulative expense recognized as at the beginning and end of that period with the offsetting entry recorded in share premium in equity. Every option that is exercised results in the issuance of one ordinary share.

At each balance sheet date, the estimates of the number of options that are expected to vest based on the non-marketing vesting conditions are revised. The Group recognizes the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

Share based incentive plans
The fair value of share grants is estimated on the date of grant by multiplying the number of shares available to be granted by the fair value of the Company's shares on the grant date. Management assumes any performance goals required by the incentive plan will be achieved and the award will vest in full.

Options granted to non-employees
The cost of options granted to non-employees is recognized at the fair value of the goods or services received, together with a corresponding increase in equity, unless that fair value of the goods or services received cannot be estimated reliably, in which case the fair value is measured by reference to the fair value of the equity instruments granted.

2.17 Interest-bearing loans and borrowings

Short-term financial liabilities consist of all liabilities with maturities up to one year. Long-term financial liabilities are liabilities with maturities over one year. All loans and borrowings are initially recognized at the fair value of the consideration received less directly attributable transaction costs. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the effective interest method. Gains and losses are recognized in the income statement when the liabilities are derecognized as well as through the amortization process. A financial liability is derecognized when the obligation underlying the liability is discharged, cancelled or expired.

2.18 Provisions

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate of the obligation can be made. The expense relating to any provision is presented in the income statement net of any reimbursement. If the effect of the time value of money is significant, provisions are discounted. Where discounting is used, the increase in the provision due to the passage of time is recognized as a financial expense.

2.19 Leases

Leases of property, plant and equipment where the Group assumes substantially all the risks and rewards of ownership of the leased asset are classified as finance leases. Finance leases are capitalized at the inception of the lease at the fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between the finance charges and reduction of the lease liability to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are charged directly against income. Capitalized leased assets are depreciated over the shorter of the estimated useful life of the asset or, over the lease term, if there is no reasonable certainty that the Group will own the leased property by the end of the lease term.

Leases where the Group does not assume substantially all the risks and rewards of ownership are classified as operating leases, and are recognized as an expense in the income statement on a straight-line basis over the lease term.

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement and requires an assessment of whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset.

3 Financial risk management

3.1 Risk management policies

Financial risk management
The Group's activities expose it to a variety of financial risks: market risk (including currency risk, interest rate risk and security price risk), credit risk and liquidity risk. The Group's overall financial risk management seeks to minimize potential adverse effects resulting from the unpredictability of financial markets on the Group's financial performance.

The Group has policies in place that describe the goals of the Group's financial risk management. The adherence to these policies is monitored by corporate treasury. The goals of the Group's corporate treasury function are to reduce the currency exposures in the income statement, optimize return on investments in cash deposits, provide financing services to the business and monitor the financial risks relating to the Group's operations.

The Group has specific operating procedures that prescribe the working practice on relevant specific financial risk management topics such as use of derivative financial instruments, investment of excess liquidity, centralization of cash, balance sheet position forecast procedures and authorization levels.

The Group uses derivative financial instruments to hedge certain foreign currency risk exposures. Corporate Treasury is responsible for using derivatives to mitigate foreign exchange risk arising from anticipated transactions and recognized monetary positions. Corporate treasury does this in close co-operation with the Group's subsidiaries. During the year 2008, the Group adopted a more proactive approach in hedging foreign currency exposures on monetary positions and forecasted transactions. In 2008, the Group applied for the first time formal hedge accounting to address specific economic exposures.

Capital risk management
The Group manages its capital to ensure that it will be able to continue as a going concern. The Group does not have a target debt-to-equity ratio. Although the Group entered into new finance leases and a new loan, the Group is committed to funding the majority of its operations with equity. The Group may choose to renew any loan that becomes payable.

As part of its overall working capital management efforts, the Group agreed with Novartis to extend payment terms on the supply of Quinvaxem antigens. These transactions are secured by identified assets of the Company. In specific cases, the Group makes use of factoring arrangements to manage the cash flow on outstanding trade accounts receivable.

The capital structure of the Group consists of financial liabilities, cash and cash equivalents and equity attributable to equity holders of the parent, comprising issued capital, reserves and retained earnings.

Significant accounting policies
Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognized, in respect of each class of financial asset, financial liability and equity instrument are disclosed in note 2.

3.2 Foreign currency risk

The Group divides the foreign currency risk into categories of transaction exposure, economic exposure and translation exposure.

The Group defines transaction exposure as the foreign currency exposure arising on monetary positions and forecasted transactions in the coming month that are denominated in a currency other than the functional currency of the group company. The Group has significant transactional currency exposures as the majority of the Group's sales are denominated in currencies other than the functional currency of the reporting subsidiaries.

Specifically, movements in the US Dollar/ Euro exchange rate affect the results of operations because a significant portion of sales are denominated in US Dollars. The Group's operating procedures require group companies to manage the foreign exchange risks against their functional currency. The target is to minimize foreign currency results on balance sheet items. Corporate treasury may hedge any remaining foreign exchange risk exposure on balance sheet positions.

The Group defines economic exposure as the foreign currency exposure to which the Group committed itself. This is the exposure associated with the time delay between entering into a contract, budget or forecast and the realization thereof. It is not the Group's policy to actively manage these exposures, but rather to hedge economic exposure on a selective basis by management's decision. The Group may apply formal hedge accounting in mitigating these risks.

The translation exposure is the exposure that arises on the translation of the financial statements of subsidiaries with different functional currencies into Euro. The Group has operations in Switzerland, Korea, Sweden and the US, which all have a different functional currency than the Euro. Consequently, movements in the currencies of these countries against the Euro will affect the results of operations because the balance sheet and the income statement of these subsidiaries are translated into Euro. The Group does not actively hedge its translation exposure.

Foreign currency risk sensitivity analysis
The Group is mainly exposed to US Dollar, Swiss Franc, Korean Won, Swedish Crown and Australian Dollar. The following table details the Group's sensitivity to a 10% strengthening of these currencies. The sensitivity analysis includes outstanding foreign currency denominated monetary items and adjusts their translation as at December 31, 2008 for a 10% change in foreign currency rates. A positive amount indicates an increase in income before income tax and equity.

For a 10% weakening of the foreign currencies against the Euro, there would be approximately an equal and opposite effect on the income before income tax and equity.

The sensitivities disclosed above are representative for the second half of 2008 as the Group applied in that period a more proactive approach on hedging of transaction exposures and also applied formal hedge accounting.

The revaluation effects of investments in foreign entities are recognized in equity. As we have significant operations denominated in other currencies than the Euro, the movements of currency exchange rates show a significant effect on equity. It is the Group's policy to limit the currency effects through the income statement. The Group does not proactively manage the currency exposure on the Group's equity.

3.3 Interest rate risk

The Group is exposed to interest rate risks as a result of changes in the market interest rates compared to loans with fixed rates. The Group has several loans with fixed interest rates, which total € 39,896 (2007: € 45,795). The Group has financial liabilities of € 20,855 with a variable interest rate as at December 31, 2008. Details on the interest rates and maturity of these loans are provided in note 5.19.

The Group has cash balances of € 183,865 of which € 12,896 is restricted. (2007: € 177,644 of which € 14,396 is restricted.) There are no other receivables that generate interest. The cash balances, including restricted cash, are either variable or fixed for a maximum period of 3 months.

	2008		2007		2006
	Impact on income statement	Impact on equity	Impact on income statement	Impact on equity	Impact on income statement
US Dollar	229	482	1,876	517	321
Swiss Franc	(373)	17,980	(4,950)	19,706	(1,180)
Korean Won	(133)	8,414	860	8,055	1,113
Swedish Crown	(538)	2,924	(486)	3,825	(33)
Australian dollar	5	808	882	—	—

Interest rate risk sensitivity analysis
The sensitivity analysis has been determined based on the exposure to interest rates at the balance sheet date and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period. The effect of a 1% increase in interest rates on the Group's profit/ (loss) before tax would be a positive result of € 947 (2007: € 1,100; 2006: € 1,152). For a 1% decrease in interest rates there would be approximately an equal and opposite effect on the profit/ (loss) before tax. A change in the interest rate does not have an impact on the equity of the Group.

The positive effect of a 1% increase of interest on profit/ (loss) before tax is mainly attributable to the Group's interest income generating assets, which are higher than its interest bearing liabilities.

3.4 Credit risk

Credit risk represents the risk of financial loss caused by default of the counterparty. The Group's principal financial assets are cash and cash equivalents, short-term deposits and trade and other receivables. These represent the Group's maximum exposure to credit risk in relation to financial assets.

The Group's credit risk is primarily attributable to its trade accounts receivable and other receivables. The Group normally trades only with recognized, credit-worthy third parties. It is the Group's policy that all customers who wish to trade on credit terms are subject to credit verification procedures. Where considered appropriate, the Group requires issuance of letters of credit to mitigate credit risk.

Receivable balances are monitored on an ongoing basis and the Group tracks the payment history of its customers to identify any payment issues that have to be resolved before entering into any new transactions. Allowances are recognized for receivable balances deemed uncollectible upon identification. In determining the recoverability of a trade receivable, the Group considers changes in the credit quality of the trade receivable from the date credit was initially granted up to the reporting date. The customer base consists mainly of well-respected companies in the field of medicine and non-governmental organizations. In 2008, the Group has not encountered significant adverse events as a result of the weak global economy.

While the Group does have concentrations of trade accounts receivable outstanding to supranational organizations, management has determined the risk of default by these organizations to be limited and therefore considers the credit risk to be within acceptable boundaries. Management believes that no further credit provision is required in excess of the allowance for doubtful debts.

The credit risk on cash and cash equivalents, and short-term deposits is diversed as the counterparties are numerous major financial institutions. Furthermore the Group currently only invests in liquid securities and money market transactions. Management does not expect any counterparty to fail to meet its obligations.

The carrying value of these financial assets represents the Group's maximum exposure to credit risk. The maximum exposure at December 31, 2008 amounted to € 242,206 (2007: € 248,850).

3.5 Security price risk

The Group's security price risk is limited to its investment in Galapagos valued at € 4,922 (2007: € 10,009), which is classified as an available-for-sale investment. The fair value is based on the market quotation of Galapagos. The Group does not actively trade in available-for-sale investments.

Security price risk sensitivity analysis
The sensitivity analysis below has been determined based on the exposure to the security price risks at the reporting date. If the Galapagos share price had been 10% higher/lower:

- The profit for the year ended 31 December 2008 would have been unaffected as the investments are classified as available-for-sale and no investments were disposed of or impaired; and
- Net unrealized gains reserve would increase/ decrease by € 492 (2007: increase/decrease by € 1,001) for the Group as a result of the changes in the fair value of the available-for-sale investment.

The Group's sensitivity to security prices did not change significantly from the prior year.

3.6 Liquidity risk

Liquidity risk represents the risk that an entity will encounter difficulty in meeting obligations associated with its financial liabilities. Prudent liquidity risk management implies ensuring sufficient availability of cash resources for funding of the operations. The Group aims to maintain a solid cash base.

The current liquidity risk is considered to be limited because the Group has sufficient funding to meet its obligations in the foreseeable future. Reference is made to note 5.19 'Short and long-term financial liabilities' for an analysis of the most significant financial liabilities. The Group has a total cash balance of € 170,969 as at December 31, 2008 (2007: € 163,248).

3.7 Financial instruments by category

Financial assets

In thousands of Euro

	2008 Financial assets at fair value through profit and loss	Loans and receivables	Available-for-sale financial assets	2008 Total	2007 Financial assets at fair value through profit and loss	Loans and receivables	Available-for-sale financial assets	2007 Total
Derivative financial instruments	1,761	—	—	1,761	29	—	—	29
Investment Galapagos	—	—	4,922	4,922	—	—	10,009	10,009
Other financial assets	—	14,920	—	14,920	—	16,153	—	16,153
Cash and cash equivalents	—	170,969	—	170,969	—	163,248	—	163,248
Trade accounts receivable	—	40,108	—	40,108	—	47,563	—	47,563
Other current assets	—	9,526	—	9,526	—	11,848	—	11,848
Total	1,761	235,523	4,922	242,206	29	238,812	10,009	248,850

The carrying value of the financial assets approximates the fair value.

Financial liabilities

In thousands of Euro

	2008 Financial liabilities at fair value through profit and loss	Designated cash flow hedges	Financial liabilities at amortized cost	2008 Total	2007 Financial liabilities at fair value through profit and loss	Designated cash flow hedges	Financial liabilities at amortized cost	2007 Total
Derivative financial instruments	194	685	—	879	16	—	—	16
Financial liabilities	—	—	60,751	60,751	—	—	52,795	52,795
Other non-current liabilities	—	—	591	591	—	—	529	529
Accounts payable	—	—	59,205	59,205	—	—	50,970	50,970
Other current liabilities	—	—	20,523	20,523	—	—	29,960	29,960
Total	194	685	141,070	141,949	16	—	134,254	134,270

The fair values of the financial liabilities of the Group approximate the carrying amount of the Group's financial instruments.

The fair values of the loans have been calculated by discounting the face values with the interest rate of financial instruments with a similar risk profile and term. The fair values of the forward exchange contracts were calculated making use of the spot rate of the underlying exchange rates as at December 31, 2008.

3.8 Derivative financial instruments

The Group uses derivative financial instruments for the management of foreign currency risks.

	2008 Fair value assets	2008 Fair value liabilities	2008 Total fair value	2007 Fair value assets	2007 Fair value liabilities	2007 Total fair value
Foreign exchange contracts	1,761	(194)	1,567	29	(16)	13
Cash flow hedge	—	(685)	(685)	—	—	—
Total derivative financial instruments	1,761	(879)	882	29	(16)	13

All derivative financial instruments mature within a year and are therefore presented as current assets or liabilities. The fair value of forward foreign exchange contracts is determined using forward foreign exchange rates.

All foreign exchange contracts, which are not designated as a qualifying hedge instrument, mature within 2 months after balance sheet date. The principal amount and fair value of foreign currency forwards that are not designated in a cash flow hedge are € 38,907 in 2008 (2007: € nil) and a positive unrealized result of € 1,567 in 2008 (2007: € 13). The Group enters in these derivative transactions to mitigate its foreign currency transaction exposure.

Cash flow hedging
The Group has designated certain qualifying derivative financial instruments as hedge instruments for cash flow hedge accounting to manage its currency risk resulting from specific contracts denominated in foreign currencies that differ from the functional currency of the Group company that engages in the contract. The principal amount and fair value of foreign currency forwards designated in a cash flow hedge are respectively € 7,535 (2007: € nil) and a negative unrealized result of € 685 (2007: € nil).

Cash flow hedges of foreign currency risks relate to forecasted transactions. These are expected to occur between 4 and 9 months after the balance sheet date. As at year-end 2008 the outstanding cash flow hedge was estimated to be 100% effective. No amounts were removed or reclassed from the hedge reserve during the period to non-financial balance sheet items or to the income statement. The Group did not engage in hedge accounting prior to 2008.

3.9 Off balance sheet transactions

The Group has the following off-balance sheet transactions, in addition to the guarantees given on assets as described in '5.6 property, plant and equipment' and '5.19 Short and long-term financial liabilities'.

Guarantees
The Group has a guarantee facility for an amount of € 10.0 million with a third-party bank.

As part of the overall working capital management efforts, the Group agreed with Novartis to extend payment terms on the supply of Quinvaxem antigens. We have provided Novartis with collateral on our Swiss premises for an amount up to € 22,847.

Total guarantees issued by the Group amount to € 3.1 million, which included a letter of credit issued by the Group for an amount of $ 1.6 million which will expire on April 14, 2013 for the benefit of the Percivia Development Center.

Covenants

Some of the Group's arrangements with financial institutions are subject to covenant clauses, whereby the Group is required to maintain certain cash thresholds. The Group did not breach any of these covenant clauses in 2008 nor does the Group foresee any breaches of these covenants in the foreseeable future.

4 Segment information

4.1 General

The Group operates in one reportable segment, which comprises the development, production and marketing of products that combat infectious diseases. The Group early adopted IFRS 8 'Operating Segments', which replaces IAS 14, 'Segment reporting', as of January 1, 2007. The Group identified the Management Board as the 'chief operating decision maker'. The Management Board reviews the consolidated operating results regularly to make decisions about resources and to assess overall performance.

In 2007, the Group's segmentation was based on the two segments that were reported to our Management Board:

- Vaccines: developing, producing and marketing vaccines worldwide to combat infectious diseases;
- Proteins: leverage Crucell's novel, proprietary technologies to develop monoclonal antibodies to combat infectious diseases.

In 2008, the Management Board decided to integrate both business units and reduce the complexity of our organization. In 2008, the separate segments were no longer reported to the Management Board.

4.2 Information about major products

The breakdown of the Group's revenues from its product sales was as follows:

In thousands of Euro

Year ended December 31,	2008	2007	2006
Paediatric vaccines	111,039	77,371	35,933
Respiratory vaccines	32,474	33,188	40,386
Travel vaccines	55,572	47,282	23,072
Other vaccines	8,907	10,705	2,998
Proteins and other business	18,063	9,023	1,529
	226,055	177,569	103,918

4.3 Information about major customers

In 2008, sales to our two largest customers, which are in the paediatric vaccines area, amounted to € 85,142 or 37.6% and € 18,390 or 8.1 % of net product sales. In 2007, sales to these customers accounted for € 45,480 or 25.6% and € 23,457 or 13.2% of net product sales, respectively.

4.4 Geographical segments

The Group operates principally in three geographical areas: Europe, North America and Asia. Segment revenue is based on the geographical location of the customers, which is the billing location of the customers. Segmentation of the assets is based on the geographical location of the assets.

In thousands of Euro

Year ended December 31,	2008	2007	2006
Revenues			
Europe	209,473	144,969	94,663
North America	33,653	33,346	13,868
Asia	19,095	18,589	16,506
Other	4,936	6,882	6,530
Total	267,157	203,786	131,567

	2008	2007
Investment in associates and joint ventures		
Europe	—	316
North America	964	549
Asia	8,275	8,205
Total	9,239	9,070

	2008	2007
Total assets		
Europe	507,431	472,557
North America	7,472	7,421
Asia	121,394	149,860
Total	636,297	629,838

	2008	2007
Capital expenditure property, plant and equipment		
Europe	7,520	26,472
North America	14	—
Asia	8,253	684
Total	15,787	27,156

5 Notes to the specific items of the consolidated financial statements

5.1 Personnel expenses

In thousands of Euro

	2008	2007	2006
Wages and salaries	59,634	58,493	48,841
Social security costs	6,806	6,734	4,469
Pension defined benefit plans	(139)	(1,592)	1,712
Pension defined contribution plans	2,408	2,436	1,770
Expenses for employee shares and option plans	4,878	7,349	4,296
Other personnel expenses	6,436	9,810	6,464
	80,023	83,230	67,552

As of December 31, 2008, we had 1,126 employees. The average number of employees in 2008 was 1,142. Personnel as at December 31, 2008 are employed in the following categories:

	2008	2007	2006
Research and Development	303	368	381
General and administrative	147	134	125
Operations	527	466	452
Marketing and sales	149	158	115
Total	1,126	1,126	1,073

The Group's personnel are located primarily in the Netherlands, Switzerland, Spain, Italy, South Korea, Sweden, the US and China.

The split per geographical area is as follows:

	2008	2007	2006
Europe	861	915	902
North America	19	19	17
Asia	246	192	154
Total	1,126	1,126	1,073

5.2 Financial income

In thousands of Euro

	2008	2007	2006
Currency gains	1,914	7,479	9,461
Interest income, third parties	5,021	5,711	3,718
Other financial income	—	—	274
	6,935	13,190	13,453

5.3 Financial expenses

	2008	2007	2006
Total interest expense	(2,973)	(3,053)	(2,481)
Less: amounts included in the cost of qualifying assets	254	772	744
	(2,719)	(2,281)	(1,737)
Currency losses	(5,840)	(8,785)	(9,625)
Other financial expenses	(1,038)	(746)	(344)
	(9,597)	(11,812)	(11,706)

5.4 Income tax

In thousands of Euro

Year ended December 31,	2008	2007	2006
Current income tax	(3,200)	(811)	(258)
Adjustments current income tax of previous years	7	(5)	(213)
Deferred taxation	11,503	3,024	10,922
Income tax	8,310	2,208	10,451

The reconciliation between the profit/ (loss) for the year multiplied by the applicable tax rate and the actual taxation is as follows:

In thousands of Euro

Year ended December 31,	2008	2007	2006
Profit/(loss) for the year before income tax	6,276	(45,118)	(97,649)
At gross weighted average income tax rate	820	12,197	21,337
Adjustments in respect of current income tax of previous years	7	(5)	(213)
Deferred tax assets not recognized	(6,301)	(380)	—
Recognition tax loss carry forwards	9,284	4,072	—
Effect of tax rate changes	3,527	(197)	3,894
Research and development tax credit	2,916	—	—
Other permanent differences	(1,741)	(3,488)	1,271
Effect of current tax losses not recognized as deferred tax assets	(202)	(9,991)	(15,838)
Income tax	8,310	2,208	10,451
Effective income tax rate	(132.4%)	4.9%	10.7%

The changes in deferred income tax assets and liabilities on a net basis were as follows in 2008 and 2007:

In thousands of Euro

	2008	2007
January 1,	(29,267)	(33,438)
Deferred tax through income statement	11,503	3,024
Deferred tax through goodwill	—	(697)
Effect of movements in exchange rates	779	1,844
December 31,	(16,985)	(29,267)

In 2007, a deferred tax asset of € 580 was recognized against goodwill as an adjustment to the provisional purchase price allocation on the acquisition of SBL. A deferred tax liability of € 1,277 was recognized against goodwill as an adjustment to the provisional purchase price allocation on the acquisition of Berna Products Corp.

The composition of the temporary differences and tax loss carry forwards in the balance sheet is as follows:

In thousands of Euro

Year ended December 31,	2008	2007
Deferred income tax liabilities		
Valuation differences attributable to:		
Inventories	(2,171)	(1,641)
Other assets	(1,614)	(521)
Net pension assets	(1,852)	(1,590)
Property, plant and equipment	(7,316)	(9,782)
Intangible assets	(14,580)	(21,269)
Liabilities	(1,649)	(105)
	(29,182)	(34,908)
Deferred income tax assets		
Losses available for offset against future taxable income	9,060	678
Valuation differences attributable to:		
Inventories	469	2,119
Other assets	1,273	595
Property, plant and equipment	1,202	1,910
Liabilities	193	339
	12,197	5,641
Offset of deferred tax balances	12,197	5,641
Reflected in the balance sheet as follows:		
Deferred tax assets	—	—
Deferred tax liability	(29,182)	(34,908)
Deferred tax liabilities, net	(16,985)	(29,267)

The Group has evaluated evidence impacting the recoverability of its deferred tax assets, which consist principally of tax loss carry forwards. In 2008, a deferred tax asset of € 8,585 was recognized for carry forward losses of Berna Biotech AG, which were previously unrecognized due to lack of evidence of future taxable income. At the end of the year the total deferred tax assets for carry forward losses amounted to € 9,060.

The Group has unrecognized tax carry forward losses of € 172,732 (2007: € 254,511; 2006: € 222,238) that are available, with certain restrictions in time, for offset against future taxable profits of the companies in which the losses arose.

The Group reached an agreement with the Dutch tax authorities to retroactively change the valuation of our intellectual property, to avoid the evaporation of unrecognized tax carry forward losses. This agreement allows the Group to recognize € 72,000 of our intellectual property as assets for tax purposes.

In the Netherlands anti-abuse laws may limit our ability to realize certain tax carry forward losses for an amount up to € 26,170.

The unrecognized carry forward losses expire as follows:

2011	17,502
2012	21,164
2013	19,153
After 2013	113,966
Unlimited	947
Total	172,732

Tax rate changes

In Korea, the tax holiday granted by the government is decreasing over time. In financial years 2008 and 2009, the applicable tax rate is 16.5%. As of 2010 the tax rate will be the regular statutory income tax rate of 22.0%. As of the year 2012 we will benefit from a tax holiday related to our investment in the Incheon, Free Economic Zone, which will significantly reduce the effective Korean income tax rate for a period of 5 years. The reduced expected realization rate for our deferred tax liabilities in Korea resulted in a taxation gain of € 3,384.

The Swedish domestic statutory corporate income tax rate amounted to 28.0% in 2008 and will decrease to 26.3% in 2009.

The Spanish domestic statutory corporate income tax rate amounted to 32.5% in 2007 and was decreased to 28.0% in 2008. The rate will also be 28.0% in 2009 and thereafter.

5.5 Profit/ (loss) per share

In thousands of Euro

	2008	2007	2006
Net profit/ (loss) attributable to ordinary shareholders	**14,586**	(42,910)	(86,946)
Weighted average number of ordinary shares for the year	**65,593,374**	65,102,801	57,064,034
Dilutive effect share options	**721,682**	—	—
Weighted average number of ordinary shares for diluted net profit/ (loss) for the year	**66,315,056**	65,102,801	57,064,034
Net profit/ (loss) per share — basic	**0.22**	(0.66)	(1.52)
Net profit/(loss) per share – diluted	**0.22**	(0.66)	(1.52)

5.6 Property, plant and equipment

Amounts in thousands of Euro

Cost	Freehold Land and buildings	Plant and equipment	Assets under construction	Total
At January 1, 2007	69,747	75,090	34,298	179,135
Additions	245	5,913	20,998	27,156
Disposals	(147)	(995)	—	(1,142)
Effect of movements in exchange rates	(4,238)	(5,299)	(412)	(9,949)
At December 31, 2007	65,607	74,709	54,884	195,200
Additions	66	7,917	7,804	15,787
Disposals	—	(1,620)	—	(1,620)
Transfer assets under construction	66	35,204	(35,270)	—
Effect of movements in exchange rates	5,456	2,450	1,886	9,792
At December 31, 2008	71,195	118,660	29,304	219,159
Depreciation and impairment				
At January 1, 2007	(12,366)	(28,751)	—	(41,117)
Depreciation charge for the year	(4,490)	(9,963)	—	(14,453)
Impairment	(171)	—	—	(171)
Disposals	144	935	—	1,079
Effect of movements in exchange rates	2,105	2,882	—	4,987
At December 31, 2007	(14,778)	(34,897)	—	(49,675)
Depreciation charge for the year	(6,715)	(9,914)	—	(16,629)
Impairment	(266)	(65)	—	(331)
Reversal of impairment	5,219	—	—	5,219
Disposals	—	1,498	—	1,498
Effect of movements in exchange rates	(3,526)	(4,509)	—	(8,035)
At December 31, 2008	(20,066)	(47,887)	—	(67,953)
Net book value				
At December 31, 2008	51,129	70,773	29,304	151,206
At December 31, 2007	50,829	39,812	54,884	145,525

Depreciation is included in the cost of goods sold for an amount of € 10,026 in 2008 (2007: € 11,176, 2006: € 8,995), research and development costs of € 4,157 in 2008 (2007: € 2,353, 2006: € 4,448) and selling, general and administrative costs of € 2,446 in 2008 (2007: € 924, 2006: 832).

Impairment
See '1 General information – 1.4 Use of estimates and judgments' in the financial statements for further details on any impairments or reversal thereof.

Lease and borrowing costs
At December 31, 2008 and 2007, the Group held equipment under finance leases with a cost of € 23,505, and €11,137, respectively and a net book value of € 21,936 and € 11,137. The equipment under finance leases includes the new Spanish filling line and laboratory equipment in Leiden, the Netherlands. These leases are secured by the value of the underlying assets.

At December 31, 2008 an amount of € 254 of borrowing costs related to the construction of a new production facility in Leiden, the Netherlands, has been capitalized (2007: € 772). The borrowing costs are capitalized at a capitalization rate of 4.55%,

Commitments
The remaining contractual commitments amount to € 20,380 (2007: € 4,696, 2006: € 11,693) for purchases of property, plant and equipment, mainly related to the new Korean production facility in the Incheon, Free Economic Zone, Korea.

5.7 Intangible assets

In thousands of Euro

Cost	Customer lists	Brands and licenses	Developed technologies	In process R&D	Total
At January 1, 2007	**11,209**	**23,142**	**87,214**	**6,962**	**128,527**
Effect of movements in exchange rates	(339)	(828)	(6,378)	(205)	(7,750)
At December 31, 2007	**10,870**	**22,314**	**80,836**	**6,757**	**120,777**
Effect of movements in exchange rates	1,172	2,480	(6,384)	770	(1,962)
At December 31, 2008	**12,042**	**24,794**	**74,452**	**7,527**	**118,815**
Amortization and impairment					
At January 1, 2007	**(979)**	**(3,254)**	**(11,217)**	**—**	**(15,450)**
Amortization	(3,032)	(3,655)	(5,207)	—	(11,894)
Effect of movements in exchange rates	54	226	332	—	612
At December 31, 2007	**(3,957)**	**(6,683)**	**(16,092)**	**—**	**(26,732)**
Amortization	(3,141)	(3,706)	(4,827)	—	(11,674)
Effect of movements in exchange rates	(640)	(1,299)	534	—	(1,405)
At December 31, 2008	**(7,738)**	**(11,688)**	**(20,385)**	**—**	**(39,811)**
Net book value					
At December 31, 2008	**4,304**	**13,106**	**54,067**	**7,527**	**79,004**
At December 31, 2007	**6,913**	**15,631**	**64,744**	**6,757**	**94,045**

Amortization of intangible assets is included in the cost of goods sold for an amount of € 127 in 2008 (2007: € 131, 2006: 0), research and development costs of € 8,635 in 2008 (2007: € 8,939, 2006: € 6,858) and selling, general and administrative costs of € 2,912 in 2008 (2007: € 2,824, 2006: 702).

Impairment

See '1 General information – 1.4 Use of estimates and judgments' in the financial statements for further details on impairments.

Material intangible assets

The following individual intangible assets are considered material to Crucell's financial statements:

In thousands of Euro

	Remaining amortization at December 31, 2008 (in years)	Carrying value December 31, 2008	Carrying value December 31, 2007
Developed technology Quinvaxem	17.7	**25,519**	34,778
Developed technology Epaxal	17.2	**10,959**	10,410
Manufacturing contract	2.2	**7,920**	10,391
Developed technology Inflexal	9.2	**7,084**	7,052
In-process R&D Flavimun	—	**7,526**	6,756
Developed Technology Vivotif	17.2	**5,595**	5,315
Brand name Berna Biotech	17.2	**4,153**	3,945

5.8 Goodwill

In thousands of Euro

	Goodwill
Cost	
At January 1, 2007	47,419
Additions	—
Adjustments to provisional values	697
Effect of movements in exchange rates	(3,739)
At December 31, 2007	44,377
Additions	—
Adjustment to cost of business combination	237
Effect of movements in exchange rates	1,462
At December 31, 2008	46,076
Net book value	
At December 31, 2008	46,076
At December 31, 2007	44,377

The goodwill was recognized on the following business combinations:

- In February 2006, the Company acquired approximately 97% of the outstanding common shares of Berna Biotech AG ('Berna Biotech') for € 348,852, excluding acquisition costs. During 2006 the remaining outstanding shares were also acquired. Berna Biotech was a fully integrated biotechnology company that marketed numerous vaccines on a global scale.
- In October 2006, the Company purchased, via its subsidiary Crucell Vaccines Inc. the assets and liabilities of the Florida-based Berna Products Corp. ('BPC') from Acambis plc for € 13,806. BPC was originally established in 1990 by Berna Biotech to market Vivotif, Berna's oral typhoid fever vaccine, in the US and Canada and was acquired by Acambis plc in 2003.
- In November 2006, the Group acquired the shares of Stockholm-based SBL Vaccin Holding AB (SBL) from 3i and SEB for a total consideration of € 39,341 in cash. SBL is a fully integrated independent Swedish biotechnology company employing 120 people. SBL's main product was Dukoral. In addition, SBL has a sales and distribution organization for vaccines in Scandinavia.

The selling shareholders of SBL Vaccin acquisition Holding AB are contractually entitled to earn-out payments based on contingent future events. In 2008, additional consideration resulting from the earn-out agreement with the former shareholders was treated as an adjustment to the cost of the business combination for an amount of € 237. This contingent consideration was not recognized in the prior year because the amount could not be measured reliably.

Goodwill allocation to cash-generating units
Goodwill acquired through business combinations has been allocated as follows:

In thousands of Euro

December 31,	2008	2007
Vaccines segment	—	44,377
2006 business acquisitions	46,076	—
Total goodwill	46,076	44,377

In 2008, the Group reorganized its reporting structure in a way that changed the composition of one or more cash-generating units to which goodwill has been allocated, as the Vaccines and the Proteins business units were integrated. In 2007, all goodwill was allocated to the Vaccines Unit. As a result of the change in composition of the reporting structure, all goodwill was allocated to the businesses acquired in 2006 on a combined basis.

Calculations of the recoverable amount show that there is no impairment as the recoverable amount of the 2006 business acquisitions exceeds the carrying amount by € 189 million.

Sensitivities to changes in assumptions
Management believes that any reasonable possible change in the key assumptions would not decrease the value in use to the extent that the related goodwill would exceed the recoverable amount. Several sensitivity analyses on key assumptions were performed and the outcome indicated that the carrying amount would not exceed the recoverable amount. Reference is made to the key assumptions below as these have a significant impact on the calculated recoverable amount:

- The recoverable goodwill amount was determined on the basis of a pre-tax weighted average cost of capital ('WACC') of 15.2%. A higher WACC percentage would reduce the recoverable amount;
- In the valuation model, future investments for enhancements/ improvements for which preparations are ongoing, have been included in the analysis; and

- The valuation is based on a discounted future cash flow model with a 5-year window and a terminal value after the last planning year in 2013. The terminal value has been set at 50%. The 50% reduction in the terminal value is to reflect that there are no new products available without significant investments for biotechnology companies.

5.9 Investments in associates and joint ventures

5.9.1 Associated companies

ADImmune Corp., Taiwan

The Group has an 11.8% stake in the share capital of Taiwan-based ADImmune Corp., (ADImmune) a company that develops, manufactures and distributes vaccines and other biological products. During 2008, our ownership of ADImmune Corp. was diluted from 20% to 11.8%. ADImmune will use Crucell's virosome technology to produce a virosomal adjuvanted influenza vaccine for the following specified markets: Taiwan, Japan and Macau. Additionally, ADImmune will produce influenza antigen in the future, which we may purchase to produce our influenza vaccine product, Inflexal V.

Summary financial information of ADImmune for the years ended December 31, 2008 and 2007, not adjusted for the percentage of ownership held by the Group is as follows:

In thousands of Euro

	2008	2007
Associate's balance sheet (ADImmune)		
Current assets	21,781	6,621
Non-current assets	70,737	38,447
Current liabilities	(6,259)	(4,918)
Non-current liabilities	(16,821)	(209)
Net assets	69,438	39,941
Associate revenues and expenses		
Revenues and other income	5,844	5,056
Expenses	(6,548)	(6,108)
Profit/ (loss) for the period	(704)	(1,052)

Kenta Biotech AG, Switzerland

On July 3, 2008, the Group sold all of the 2,625,000 shares it owned in Kenta Biotech AG to Ingro Finanz AG. Prior to this sale, our ownership interest had already been diluted from 37% in 2006 to 22% by the end of 2007. We realized an accounting gain of € 1,570 on the sale.

Pevion Biotech AG, Switzerland

Pevion Biotech AG develops vaccines based on its proprietary technology platforms. In November 2007, the Group sold all 2.9 million shares it owned in Pevion Biotech AG for € 6,081 to the other Pevion Biotech shareholders. The Group realized an accounting gain of € 2,186 on the sale.

5.9.2 Joint ventures

Percivia LLC, United States

In August 2006, DSM Pharmaceutical Products Inc, and the Group established a joint venture, Percivia LLC (Percivia) to operate the PERCIVIA PER.C6 Development Center in Cambridge, MA, US. Each company holds 50% of the shares. The initial contribution amounts to $ 500. The joint venture further develops the PER.C6 cell line and provides a unique solution for the production of pharmaceutical proteins to licensees utilizing the PER.C6 human cell line in the biotech industry. Percivia recharges the costs incurred to the venturers. No additional fundings are planned.

Summary financial information of this joint venture, not adjusted for the percentage ownership held by the Group is as follows:

In thousands of Euro

	2008	2007
Joint Venture's balance sheet (Percivia)		
Current assets	2,060	1,131
Non-current assets	1,360	981
Current liabilities	(1,440)	(965)
Non-current liabilities	—	—
Net assets	1,980	1,147
Joint Venture's revenues and expenses		
Revenues	8,721	8,081
Expenses	(7,972)	(7,348)
Profit/ (loss) for the period	749	733

The tax charge for PERCIVIA PER.C6 Development Center is accounted for in the financial statements of the venturers. The tax charge recognized in the financial statements relating to the percentage owned by the Group amounts to € 151 in 2008 (2007: € 146).

5.10 Retirement benefit obligations

The Group provides employee benefit plans to most of its employees by means of various pension plans. These plans comply with local regulations and practices in the countries in which they operate and differ based on legal requirements, tax legislation, local customs and economic conditions in those countries. While the nature of the plans varies by country, in general, the benefits provided depend on remuneration and years of service. Most of these benefits are administrated by insurance companies or pension funds.

The Group adopted IFRIC 14, 'IAS 19 – The limit on a defined benefit asset, minimum funding requirements and their interactions' in 2008. The interpretation provides guidance on assessing the limit of the surplus in a defined benefit pension plan that can be recognized as an asset. It also explains how the pension asset or liability may be affected by a statutory or contractual minimum funding requirement. The pension fund in Switzerland has a minimum funding requirement and the application of the interpretation resulted in an increase in the assets recorded on the Group's balance sheet of € 7,853 (2007: € 4,918, 2006: € 746) and a corresponding increase in the Group's equity of € 6,165 (2007: € 3,861, 2006: € 586), which includes a net tax effect of € 1,688 (2007: € 1,057, 2006: € 160). The result for the year increased by € 2,101 (2007: € 3,037, 2006: € 367) as a result of the application of IFRIC 14. As required by IFRS, all comparative figures were adjusted retrospectively as if the interpretation had always been applied. Also see '1.5 Changes in accounting policies'.

Recognition of pension expenses in the income statement and balance sheet:

In thousands of Euro

Year ended December 31	2008	2007	2006
Income statement			
Defined benefit plans	(139)	(1,592)	1,712
Defined contribution plans	2,408	2,436	1,770
Total	2,269	844	3,482

Year ended December 31	2008	2007
Balance sheet		
Defined benefit plans		
Pension assets	8,612	7,397
Pension liability	(2,710)	(3,466)
Net pension asset	5,902	3,931

Prior to the acquisition of Berna Biotech and SBL, the Group did not operate any defined benefit plans. After the acquisitions in 2006, the Group operates defined benefit plans in Switzerland, Korea and Sweden. The pension asset of € 8,612 (2007: € 7,397) relates to the Swiss pension fund while the pension liability of € 2,710 (2008: € 3,466) relates to the Swedish and the Korean pension funds. In total, 97% (2007: 96%) of the plan assets and 91 % (2007: 90%) of the defined benefit obligation relate to the Swiss pension fund.

The weighted average of the principal assumptions used in determining the employee benefit obligations for the defined benefit plans of the Group are shown below:

In percent

	2008	2007	2006
Discount rate	3.37%	3.40%	3.32%
Expected return on plan assets	4.53%	4.53%	4.55%
Future salary increases	1.19%	1.22%	1.19%
Future pension increases	0.71%	0.78%	0.66%

Changes in these key assumptions can have a significant impact on the defined benefit obligations, funding requirements and periodic costs incurred. The Group consults at least annually with external actuaries regarding these assumptions.

Changes in the present value of the defined benefit obligation are as follows:

In thousands of Euro

Year ended December 31,	2008	2007
Opening defined benefit obligation, January 1,	(74,506)	(72,679)
Interest cost	(2,165)	(2,363)
Current service cost	(3,748)	(3,369)
Benefits paid	4,418	2,450
Actuarial gains/(losses)	(3,038)	(934)
Exchange differences	(6,446)	2,389
Closing defined benefit obligation	(85,485)	(74,506)

Changes in the fair value of plan assets are as follows:

In thousands of Euro

	2008	2007
Opening fair value of plan assets	**99,032**	**102,306**
Expected return on plan assets	4,606	4,528
Contributions by employer	597	2,338
Contributions by participants	1,053	984
Benefits paid	(4,062)	(2,208)
Actuarial gains/(losses)	(9,213)	(5,727)
Exchange differences	9,555	(3,189)
Fair value of plan assets, December 31	**101,568**	**99,032**

In 2009, the Group expects to contribute an amount similar to the amount contributed in 2007 to its defined benefit pension plans. The amount in 2008 was lower due to partial usage of an employer contribution reserve in Switzerland. The actual return on plan assets for the year ended December 31, 2008 amounted to a loss of € 4,639 (2007: loss of € 1,199).

The costs for defined benefit plans are as follows:

In thousands of Euro

Year ended December 31,	2008	2007	2006
Current service cost	3,748	3,369	3,105
Interest cost	2,166	2,363	2,012
Expected return on plan assets	(4,606)	(4,528)	(3,758)
Actuarial gains and losses	11,014	6,651	(862)
The effect of changes due to the asset ceiling	(11,408)	(8,463)	2,260
Employee contributions	(1,053)	(984)	(981)
Other	—	—	(64)
	(139)	(1,592)	1,712

The amounts in the balance sheet are determined as follows:

In thousands of Euro

Year ended December 31,	2008	2007
Defined benefit obligation	(85,485)	(74,506)
Fair value of plan assets	101,568	99,032
Funded status	16,083	24,526
Unrecognized net actuarial losses	1,261	233
Amount not recognized as asset due to asset ceiling	(11,442)	(20,828)
Net pension asset	5,902	3,931

In thousands of Euro

Year ended December 31,	2008	2007	2006
Defined benefit obligation	(85,485)	(74,506)	(72,679)
Plan assets	101,568	99,032	102,306
Surplus	16,083	24,526	29,627
Experience adjustments on plan liabilities – loss	(3,038)	(934)	834
Experience adjustments on plan assets – loss	(9,213)	(5,727)	(211)

The major categories of plan assets as a percentage of the fair value of total plan assets are as follows:

	2008	2007
Bonds	44.9%	41.7%
Equity	22.0%	26.1%
Property	28.4%	28.6%
Other	4.7%	3.6%
	100.0%	100.0%

The overall expected rate of return on assets is determined based on the market prices expected to be applicable to the period over which the obligation is to be settled and the relative weight of the separate categories of plan assets.

5.11 Other financial assets (non-current)

In thousands of Euro

Year ended December 31,	2008	2007
Long-term restricted cash	12,896	14,396
Long-term deposits and guarantees	1,645	1,388
Other long-term receivables	379	369
	14,920	16,153

5.12 Cash and cash equivalents

In thousands of Euro

Year ended December 31,	2008	2007
Cash at banks and in hand	91,853	108,273
Call deposits	79,116	54,975
	170,969	163,248

Cash and cash equivalents are denominated in the following currencies (translated into Euros):

In thousands of Euro

Year ended December 31,	2008	2007
Euro (€)	111,909	99,304
US Dollar ($)	37,975	41,954
Swiss Franc (CHF)	4,144	8,426
Swedish Crown (SEK)	7,746	9,997
Korean Won (KRW)	7,360	2,331
Other currencies	1,835	1,236
	170,969	163,248

5.13 Trade accounts receivable

In thousands of Euro

Year ended December 31,	2008	2007
Trade receivables from third-party customers	39,343	47,553
Trade receivables from associates and joint ventures	765	10
	40,108	47,563

At December 31, 2008, trade receivables are shown net of an allowance for doubtful debts for an amount of € 2,289 (2007: € 2,763). The Group's normal credit period is 30 days, although in some jurisdictions, including Italy, Korea and Spain, a credit period of 60 days is maintained in line with local customs. Receivables are denominated in several currencies and can be specified as follows:

Year ended December 31,	2008	2007
Euro (€)	20,569	28,343
US Dollar ($)	8,985	6,056
Swiss Franc (CHF)	5,058	4,077
Swedish Crown (SEK)	2,810	7,264
Korean Won (KRW)	1,334	985
Other currencies	1,352	838
	40,108	47,563

Aging of past due but not impaired

Included in the Group's trade receivables balance are debtors with a carrying amount of € 11,678 (2007: € 9,051) which are past due at the reporting date for which the Group has not provided because there has not been a significant change in credit quality and the amounts are considered recoverable. The Group does not hold any collateral over these balances.

In thousands of Euro

Year ended December 31,	2008	2007
0-60 days	7,810	5,083
60-90 days	1,407	479
90-120 days	340	1,411
Over 120 days	2,121	2,078
	11,678	9,051

Movement in the allowance for doubtful debts:

In thousands of Euro

	2008	2007
Balance at beginning of the year	2,763	4,069
Additions to provisions	1,429	535
Amounts written off as uncollectible	(1,379)	(968)
Unused amounts reversed	(289)	(601)
Effect of movements in exchange rates	(235)	(272)
	2,289	2,763

The amount written off in 2008 as uncollectible relates to customers of our Korean subsidiary and was already provided for in the purchase price allocation of the Berna Biotech Group.

The amount written off in 2007 as uncollectible relates to customers of our Swedish subsidiary and was already provided for in the purchase price allocation of SBL Vaccin Holding AB.

5.14 Inventories

In thousands of Euro

	2008	2007
Raw materials and consumables	13,286	15,162
Work in progress	61,980	46,157
Finished products	16,581	5,914
	91,847	67,233

In order to be able to meet the demand from the market (e.g. in case of outbreak of a disease) the Group stocks certain inventories to a level such that they may not be utilized in one year. Provisions are recognized for obsolete inventory. The amount of write-down of inventories recognized as an expense is € 3,218 (2007: € 6,428).

The amount of inventories recognized as an expense in cost of product sales is € 128,632 (2007: € 113,250, 2006: € 74,523).

5.15 Other current assets

In thousands of Euro

Year ended December 31,	2008	2007
Accrued income	**4,495**	10,164
Prepaid expenses	**3,612**	3,177
Other short-term receivables	**6,658**	10,826
Director's loan	**134**	134
Income tax receivables	**2,734**	888
Derivative financial instruments	**1,761**	29
	19,394	**25,218**

5.16 Issued share capital and reserves

Crucell's authorized share capital amounts to 85,000,000 ordinary shares and 85,000,000 preference shares, each with a par value of € 0.24. As of December 31, 2008, there were 65,833,242 ordinary shares issued and outstanding (2007: 65,348,796). No preference shares are issued and outstanding as of December 31, 2008.

On October 25, 2000, the Company established a foundation called Stichting Preferente Aandelen Crucell, also referred to as the Preferred Foundation. The Preferred Foundation's object is to safeguard the interests of Crucell, its business and parties connected therewith by blocking any influences that may threaten these interests, which interests may include the continuity, independence or identity of Crucell, its business and parties connected therewith. The Preferred Foundation can safeguard these interests through acquiring and managing the preference shares and by exercising the rights attaching to these shares, in particular, the voting rights.

The agreement between the Company and the Preferred Foundation grants an option to the Preferred Foundation to acquire preference shares up to 100% of the number of our outstanding shares as necessary to match the total number of statutory votes on all of the ordinary shares outstanding at the time of an acquisition. The Preferred Foundation must pay at least 25% of the nominal value of the preference shares it acquires from the Company. If the Company has previously acquired any preference shares, they may be cancelled.

A board of governors of up to five persons directs the Preferred Foundation. Mr. J.P. Oosterveld, in his capacity as chairman of our Supervisory Board, and Mr. P. Bouw, Mr. M.W. den Boogert, Mr. S. van Wijnbergen and Mr. G.P. Krans, have been appointed to the board of governors. A majority of these members may not be members or former members of the Management or Supervisory Board of the Company, or an employee of any of our advisers, any of our banks or us. The board of governors appoints these independent members. The Supervisory Board appoints the non-independent members after consultation with the Management Board.

Ordinary shares issued and fully paid	Shares 000	Issued capital € 000
At January 1, 2006	**41,441**	**9,946**
Issued in February 2006 in exchange for issued share capital of Berna Biotech	16,931	4,064
Shares issued in relating to private placement and acquisition of minority interests	5,022	1,205
Shares issued relating to share-based payments	1,408	338
At December 31, 2006	**64,802**	**15,553**
Shares issued relating to share-based payments	547	132
At December 31, 2007	**65,349**	**15,685**
Shares issued relating to share-based payments	484	115
At December 31, 2008	**65,833**	**15,800**

5.17 Share-based payment plans

Stock-based compensation
Employee stock option plans
The Group maintains stock option plans whereby the Remuneration committee of the Supervisory Board may grant options to employees, directors and members of the Supervisory Board. The compensation expenses included in operating expenses for those plans were € 5,053, € 6,524 and € 4,000 in 2008, 2007 and 2006, respectively.

In December 2004, the Supervisory Board approved a new option plan (the '2005 Plan') providing for the grant of stock options to non-Management Committee members. Options granted under this stock option plan are exercisable once vested. Granted options vest straight line over a period of four years. Compensation costs are recognized in accordance with the accelerated method.

The options expire five years after date of grant. Upon termination of employment with Crucell, options must be exercised within 90 days. Options granted under the stock option plan are granted at exercise prices, which equal the fair value of the ordinary shares of the Company at the date of grant.

All options granted under previous stock option plans (the 'Prior Plans') are exercisable immediately upon grant. The options expire four to eight years from the date of grant, or earlier upon termination of employment with the Group. Upon termination of employment, options must be exercised within 90 days. No further grants are to be made under the Prior Plans.

At the annual General Meeting of Shareholders in 2008, the shareholders of the Company approved the revised long-term incentive (LTI) plan for the Management Board. Under the terms of the LTI plan, options are conditionally granted and vest at the end of a four-year performance period. The conditionally granted options include a market condition that is taken into account when estimating the fair value of the equity instruments granted. The number of LTI options that vest are based on the fulfilment of the LTI performance condition. On the vesting date, Crucell's Total Shareholder Return ('TSR') performance is measured against the performance of the NASDAQ Biotechnology Index during the performance period. The positive difference in percentages, if any, between Crucell's TSR compared to the performance of the NASDAQ Biotechnology Index, determines the number of LTI options that vest on the vesting date. Depending on the level of achievement of these market measures, at the end of three years, the number of shares vesting could be 0%-200% of the number of options originally granted. The new LTI plan will impact the Group's results for the first time in 2009.

At the annual General Meeting of Shareholders in 2008, the shareholders of the Company approved an additional option grant to the Management Board of 800.000 options. The options are conditionally granted and vest at the end of a three-year performance period starting June 2, 2008. The conditionally granted options include a market condition that is taken into account when estimating the fair value of the equity instruments granted. The market condition is an absolute total shareholder return of plus 50% share value measured three years after the grant.

The Group accounts for its employee stock options under the fair value method. The fair value of options is estimated at the date of grant using the Black-Scholes option-pricing model, with the following weighted average assumptions:

In percent

Year ended December 31,	2008	2007	2006
Risk-free interest rate	**4.3%**	4.1%	3.6%
Expected dividend yield	**—**	—	—
Expected volatility	**36.7%**	33.3%	41.8%
Expected life (years)	**4.76**	4.25	4.25

The risk-free interest rate is based on Dutch treasury securities in effect at the time of grant. In determining the expected volatility, we take into account the historical volatility of the Company's stock over a period commensurate with the expected term of the employee stock options. When establishing the expected life, we take into account the contractual term of the options and historical employee exercise behavior. The weighted average fair value of options granted during the years ended December 31, 2008, 2007 and 2006 was € 4.03, € 5.34 and € 6.96, respectively.

A summary of the stock option activity for the outstanding plans is as follows:

	Number of options	Weighted average exercise price
Balance at January 1, 2006	**4,029,504**	**6.43**
Granted	953,466	18.76
Exercised	(1,284,655)	4.16
Forfeited	(12,875)	19.40
Balance at December 31, 2006	**3,685,440**	**10.36**
Granted	1,514,165	16.97
Exercised	(301,475)	6.45
Forfeited	(237,447)	19.15
Balance at December 31, 2007	**4,660,683**	**12.31**
Granted	2,639,640	11.59
Exercised	(420,270)	7.58
Forfeited	(592,175)	16.55
Balance at December 31, 2008	**6,287,878**	**11.92**

Included in the options outstanding as of December 31, 2008 are also options to acquire ordinary shares held by certain former employees and consultants. These individuals have been permitted to continue vesting in these options for services rendered.

The following table summarizes information about the company's stock options outstanding at December 31, 2008:

Exercise price	Outstanding options at December 31, 2008	Weighted average exercise price	Weighted average remaining contractual life (years)	Excercisable options	Weighted average exercise price-exercisable options
€ 2.35 – € 5.00	516,125	3.34	2.12	516,125	3.34
€ 5.00 – € 9.99	1,689,724	8.19	2.22	1,223,104	7.74
€ 10.00 – € 14.99	2,677,125	12.45	4.34	247,625	12.74
€ 15.00 – € 19.99	1,193,031	18.20	2.92	452,483	17.91
€ 20.00 – € 22.22	211,873	20.42	2.19	113,970	20.50
Total	**6,287,878**	**11.92**	**3.24**	**2,553,307**	**9.71**

As of December 31, 2008, a total of 9,874,986 ordinary shares, representing 15% (2007: 15%) of the issued share capital, has been reserved for issuance under the option plan, of which 6,287,878 (2007: 4,660,683) were subject to outstanding options.

Share-based incentive plans
In addition to the employee stock option plans for executives as described in the previous paragraph, the Company operated incentive plans for executives up to 2008 that involved the issuance of share awards.

Up to 2008, the Group operated the 2005 Short-term Incentive Plan (the 'STI Plan'). Crucell granted executives share awards with vesting contingent upon meeting various company-wide, departmental and individual performance goals. The employees granted shares under the STI Plan were allowed to elect to receive either cash (at a 25% discount from the total award) or shares if certain performance criteria were met.

Grants under the STI Plan were accounted for as liabilities and included in accrued compensation and related benefits in the accompanying balance sheets. In 2007, executives were entitled to a total of 15,544 STI Plan shares, after deduction of income tax. Shares granted under the STI Plan were issued to the executives in the first quarter of 2008. No more issuances under this STI plan can take place. At the annual General Meeting of Shareholders in 2008, the shareholders approved the 2008, STI cash-based payment plan and this supersedes the 2005 STI share-based payment plan.

Up to 2008, the Group operated the 2005 Long-term Incentive Plan (the 'LTI Plan'), which allowed for the issuance of up to 36,842 shares of common stock to be granted to executives with vesting contingent upon meeting various performance conditions. Depending on the level of achievement of these market measures, at the end of three years, the number of shares vesting could be 0%-200% of the number of shares originally allowed for issuance. In 2008, a total of 20,104 shares was granted under the terms of the 2005 LTI plan. No more issuances under this LTI plan can take place. At the annual General Meeting of Shareholders in 2008, the shareholders approved the 2008 LTI option-based payment plan as described above and this supersedes the 2005 LTI share-based payment plan.

Stock option grants to non-employees
Crucell has a total number of 67,604 (2007: 67,604) stock options to various non-employees outstanding in connection with consulting agreements over the years. The exercise prices range from € 5.38 to € 18.22 per share and the stock options expire on dates ranging from May 2010 through August 2012. During 2008, the Company issued no stock options to non-employees.

The Company recorded compensation expense associated with these stock options of € 24, € 11 and € 295 for the years ended December 31, 2008, 2007 and 2006, respectively.

Stock option grants to non-employees are made pursuant to approved stock option plans and activity related thereto is included in the tables above with the employee grants of the approved plans.

5.18 Provisions, commitments and contingencies

In thousands of Euro

	Restructuring	Litigation	Employee benefits	Other	Total
At January 1, 2007	**1,646**	**1,000**	**3,919**	**1,441**	**8,006**
Arising during the year	—	—	—	657	657
Utilized	(1,364)	(77)	—	(752)	(2,193)
Unused amounts reversed	(276)	(50)	—	(290)	(616)
Movement defined benefit liability	—	—	(267)	—	(267)
Exchange adjustment	(6)	(18)	(186)	(43)	(253)
At December 31, 2007	**—**	**855**	**3,466**	**1,013**	**5,334**
Current 2007	—	—	—	761	761
Non-current 2007	—	855	3,466	252	4,573
At January 1, 2008	**—**	**855**	**3,466**	**1,013**	**5,334**
Arising during the year	684	705	—	626	2,015
Utilized	(74)	(2)	—	(491)	(567)
Unused amounts reversed	—	—	—	(33)	(33)
Movement defined benefit liability	—	—	(204)	—	(204)
Exchange adjustment	—	90	(552)	75	(387)
At December 31, 2008	**610**	**1,648**	**2,710**	**1,190**	**6,158**
Current 2008	610	—	—	971	1,581
Non-current 2008	—	1,648	2,710	219	4,577

Provisions

Restructuring

In 2008, a restructuring program in our Italian subsidiary Berna Biotech Italia Srl. was executed. A total provision of € 684 was recognized of which € 610 was outstanding as per year-end 2008.

In 2006, a restructuring charge was recognized in relation to centralization of R&D functions in Leiden and phasing out R&D projects in Switzerland. The decision to concentrate R&D in Leiden was made to increase efficiency in R&D spending and resulted in a reduction in the number of staff employed, which was effectuated in the first quarter of 2007.

Legal proceedings

The Group is subject to certain lawsuits and other legal proceedings. The current status of any pending proceedings has been reviewed with legal counsel. Upon consideration of known relevant facts and circumstances, provisions are recognized for losses that are considered to be probable and that can be reasonably estimated at balance sheet date.

Complaint filed by Korean landlord

At the end of 2007, our Korean landlord advised us it would stop providing utilities to us in the near future and also filed a complaint against us seeking the removal of two additional buildings at the Korean facility and delivery to the landlord of the land on which those buildings are located. In October 2008, we reached an agreement to relocate our Korean production facility from the Shingal site in Yongin City to the Incheon, Free Economic Zone. All parties involved, including our current landlord, have agreed on the time line and conditions of this relocation, enabling a smooth transition to the new production facility. All litigation surrounding our existing Korean production facility has been settled.

Deductibility of research and development costs

In Italy, Berna Biotech Italia Srl. was subject to a tax audit for fiscal years 2001 and 2002. For the year 2001, a settlement was reached with the Italian tax authorities in 2007. For the year 2002, no settlement has been reached. The tax authorities issued an assessment that deviates from the amount that was filed in the tax return. We have challenged this assessment in court. We made a provision for the costs of additional taxes, penalties and interest, as well as lawyers' fees, which we expect we would have to pay as a result. One of the items in dispute is the deductibility of the research and development costs we make in Italy. The Group won the initial court case with respect to the deductibility of the research and development costs. The Italian tax authorities appealed this decision.

In 2008, the Italian tax authorities also challenged the deductibility of research and development costs for the year 2003 and issued an assessment. We will challenge this assessment in court. The Italian tax authorities may also challenge the deductibility of research and development costs for the years 2004 to 2008. As the Group considers it more likely than not that the research and development cost will be tax deductible, no additional provision was recognized for the deductibility of research and development costs.

Complaint against government grant awarded
In 2008, a competitor of Crucell filed a protest against the award of a government grant to Crucell for the development and manufacture of a vaccine against the Ebola and Marburg virus. The complaint was filed against the US. Government but Crucell voluntarily joined the proceedings to defend the award. Following a dismissal of the protest by the US Government Accountability Office (GAO), the competitor filed an appeal which is currently pending before the Court of Appeal of the Federal Circuit (CAFC).

Employee benefits
Further reference is made to retirement benefit obligations. See note 5.10.

Other
Other provisions mainly relate to asset retirement obligations and warranties.

Commitments and contingencies
Contingent liability STAR technology
The Group acquired STAR technology in 2004 through the purchase of ChromaGenics B.V., a privately held biotechnology company based in Amsterdam. In connection with the purchase, we also entered in a contingent payment agreement that could result in additional payments of up to € 7.0 million to former ChromaGenics shareholders upon receipt of revenues and royalties generated from the STAR technology. In connection with this agreement, we paid € 2.0 million in 2007. The expense was recognized in the cost of goods sold. No payments were made in 2008.

5.19 Short and long-term financial liabilities

This note provides information about the contractual terms of the Group's loans and borrowings. For more information about the Group's exposure to financial market risks, see note 3.

Debt repayment schedule at December 31, 2008:

In thousands of Euro

	Total 2008	2009	2010	2011	2012	2013	More than 5 years	Total 2007
Mortgage loan*	**16,461**	367	384	401	420	441	14,448	16,811
Equipment lease	**20,526**	2,777	3,010	3,371	6,135	1,776	3,457	10,080
Comprehensive credit limit Berna Biotech Korea Corp.	**20,855**	20,855	—	—	—	—	—	—
Privately placed bond Korea Corp.	**—**	—	—	—	—	—	—	14,540
Loan Berna Biotech Korea Corp.	**2,909**	1,455	1,454	—	—	—	—	4,364
Factoring liabilities	**—**	—	—	—	—	—	—	5,653
Other short-term bank loans	**—**	—	—	—	—	—	—	1,347
	60,751	**25,454**	**4,848**	**3,772**	**6,555**	**2,217**	**17,905**	**52,795**

* Calculated at the interest rate applicable until December 31, 2010.

Mortgage loan

In December 2005, the Group entered into a Euro mortgage loan of up to € 17,091 and as of December 31, 2006 the Group has drawn the maximum amount. In 2006, interest was accrued to the loan and no payments of principal or interest were required. Beginning January 1, 2007, the loan is being repaid through monthly payments over 15 years. A balloon repayment of € 10,000 will be made at the end of the 15 years. The loan matures on December 31, 2021. The loan bears interest at 4.55% for the first five years. After this period the rates will be renegotiated. The land, building, part of the equipment and a compensating cash balance arrangement with a bank in the amount of € 10,000 secure the loan. The carrying amount of the underlying secured assets was at the year-end € 24,015 (2007: € 26,946).

Finance lease liabilities

Finance leases mainly relate to equipment for the new production facility in Leiden. The vast majority of the finance lease liabilities are denominated in Euro. All leases are on a fixed repayment basis and interest rates are fixed at the contract date. For further information see note 5.22.

Comprehensive credit limit Berna Biotech Korea Corp.

On June 12, 2008 Berna Biotech Korea Corp. entered into a comprehensive credit limit transaction agreement. Under the terms of the agreement Berna Biotech Korea Corp. may freely borrow and repay money for an amount of KRW 30 billion during the period ending on May 31, 2009. In December 2008, Berna Biotech Korea Corp. agreed on an additional facility for KRW 10 billion. The loan has a variable interest rate that is based on a Korean interest index plus a mark-up. As per year-end the interest percentage was 6.79% and an amount of KRW 37 billion (€ 20,855) was drawn under the agreement.

Loan Berna Biotech Korea Corp.

Berna Biotech Korea Corp. had an unsecured Euro loan that bears interest at 5.45% which is outstanding as per December 31, 2008. The original maturity date of the loan was August 1, 2010, but the loan was repaid in full on February 2, 2009.

Privately placed bond Berna Biotech Korea Corp.

Berna Biotech Korea Corp ('Berna Biotech Korea') issued a Korean Won denominated bond with an interest rate of 6.73%. The privately placed bond by Berna Biotech Korea Corp. was repaid on June 13, 2008.

Factoring liabilities

In December 2007, the Group factored trade accounts receivable for a total amount of € 5,653 with an external party in Italy. The Group did not transfer substantially all the risks and rewards associated with ownership of the transferred trade accounts receivable, specifically the credit risk, and consequently the cash payments received are accounted for as a financial liability. No interest is charged on the factoring liabilities.

5.20 Other liabilities and deferred income – current and non-current

In thousands of Euro

	Current	Non-current	2008 Total	Current	Non-current	2007 Total
Deferred income	7,882	7,054	14,936	7,921	11,594	19,515
Accrued salary expenses and payroll taxes	9,817	—	9,817	10,318	—	10,318
Accrued expenses	8,540	—	8,540	14,684	—	14,684
Derivative financial instruments	879	—	879	16	—	16
Other liabilities	2,166	591	2,757	4,958	529	5,487
	29,284	7,645	36,929	37,897	12,123	50,020

5.21 Trade accounts payables

In thousands of Euro

Year ended December 31,	2008	2007
Trade accounts payables to third parties	58,182	50,638
Trade accounts payables to joint ventures	1,023	332
	59,205	50,970

Trade accounts payables are generally paid under the payment terms, which vary by company and region. The Group's general payment terms are typically 30 days.

5.22 Operating and finance leases

Operating lease commitments
The Group leases certain research and corporate facilities, motor vehicles and items of machinery and equipment. No restrictions are placed upon the lessee by entering into these leases. Future minimum lease payments under operating leases as at December 31, 2008 and 2007 are as follows:

In thousands of Euro

Year ended December 31,	2008	2007
Within one year	3,830	4,798
After one year but not more than five years	10,073	15,308
More than five years	10,759	14,155
	24,662	34,261

Most operating leases are increased by a general price index on an annual basis.

Finance lease commitments
Certain of the Group's fixtures and equipment are subject to finance leases. These leases mainly relate to equipment for the new production facility in Leiden. Interest rates are fixed at the contract date. All leases are on a fixed repayment basis and no arrangements have been entered into for contingent rental payments. The fair value of the Group's lease obligations approximates their carrying amount. The Group's obligations under finance leases are secured by the value of the underlying assets. The average term of finance leases entered into is 5.5 years.

Future minimum lease payments under finance leases as at December 31, 2008 and 2007 are as follows:

In thousands of Euro

	2008		2007	
	Minimum payments	Present value of minimum payments	Minimum payments	Present value of minimum payments
Within one year	4,134	2,777	2,038	1,420
After one year but not more than five years	17,284	14,292	10,937	8,660
More than five years	3,580	3,457	—	—
	24,998	20,526	12,975	1 0,080

5.23 Related parties

Related party transactions within the group
The Group has related party transactions and balances with joint venture partners, associates and directors and executive officers. All transactions with related parties were carried out under normal market conditions (arm's length principle). There are no related party transactions outside the normal course of business.

The following table provides the total value of transactions which have been entered into with related parties, excluding directors and executive officers, for the relevant financial year.

In thousands of Euro

	Income and expenses for the year ended December 31,			Balance outstanding as at December 31,	
Related party	2008	2007	2006	2008	2007
Sales of goods and services					
Pevion Biotech AG	–	364	251	–	–
Kenta Biotech AG	130	223	168	–	–
ADImmune Corp.	3,262	2,271	–	4,495	6,724
Expenses					
Percivia	(4,081)	(4,247)	(1,227)	(1,023)	(332)
Avv Falaguerra	(34)	(17)	(12)	(43)	(6)
Kenta Biotech AG	–	–	(60)	–	–

Mr. Falaguerra, the chairman of the Board of Directors of the Italian subsidiary, is related to Avv. Falaguerra, an Italian firm that provides taxation services to the Italian subsidiary.

Terms and conditions of transactions with related parties
The sales to and purchases from related parties are made at normal market prices. Outstanding balances at the year-end are unsecured, interest free and settlement occurs in cash. There have been no guarantees provided by the Group or received in respect of any related party receivables or payables. For the year ended December 31, 2008, the Group has not made any provision for doubtful debts relating to amounts owed by related parties (2007: nil). This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Management Board
The total remuneration and related costs (excluding share-based payments – see information below on stock options and performance stock) of the members of the Management Board over the past three years, is as follows:

In thousands of Euro

	2008	2007	2006
Salaries	1,259	1,035	1,005
Bonuses	782	647	893
Pension costs	260	202	205
Other	39	37	37
	2,340	1,921	2,140

The remuneration of the individual members of our Management Board during 2008, excluding stock options, was as follows:

Name	Salaries	Bonuses[1]	Pension costs[2]	Other costs[3]	Total
R.H.P. Brus	433	373	77	—	883
L. Kruimer	292	168	62	13	535
C. de Jong (as of May 31, 2008) [4]	184	119	27	7	337
J. Goudsmit	350	122	94	19	585
Totals	**1,259**	**782**	**260**	**39**	**2,340**

[1] Bonus expense includes the incentive plans to which the Management Board is entitled as at December 31, 2008. The bonus expense excludes option exercises.

[2] 'Pension Costs' include pensions, social security costs and disability insurance.

[3] 'Other costs' include company cars.

[4] Cees de Jong's remuneration for the year 2008 is included pro rata as of May 31, 2008.

Pension, retirement and similar arrangements for our Management Board members consist of the defined contribution plan, and we do not have further pension obligations beyond the annual premium contribution.

The Company's Management Board members held the following options for the period ended December 31, 2008:

Name of Holder	Options held at December 31, 2007[1]	Year of expiration	Exercise Price	Granted 2008	Exercised 2008	Forfeited 2008	Options held at December 31, 2008
R.H.P. Brus	250,000	2009	9.40	—	—	—	**250,000**
	200,000	2011	3.49	—	—	—	**200,000**
	90,000	2011	2.64	—	—	—	**90,000**
	125,000	2011	5.94	—	—	—	**125,000**
	—	2013	12.23	300,000	—	—	**300,000**
L. Kruimer	85,000	2009	9.40	—	(85,000)	—	**—**
	30,000	2011	3.49	—	—	—	**30,000**
	125,000	2011	5.94	—	—	—	**125,000**
	—	2013	12.23	150,000	—	—	**150,000**
C. de Jong	185,000	2012	14.58	—	—	—	**185,000**
	—	2013	12.23	200,000	—	—	**200,000**
J. Goudsmit	85,000	2009	9.40	—	—	—	**85,000**
	60,000	2011	2.64	—	(60,000)	—	**—**
	125,000	2011	5.94	—	—	—	**125,000**
	—	2013	12.23	150,000	—		**150,000**
Totals	**1,360,000**			**800,000**	**(145,000)**	**—**	**2,015,000**

[1] The options held at December 31, 2007 include 185,000 options of Cees de Jong who was not a member of the Management Board until May 30, 2008.

In April 2008, Jaap Goudsmit exercised 60,000 options with an exercise price of € 2.64 and a total value of € 431. In May 2008, Leon Kruimer exercised 85,000 options with an exercise price of € 9.40 and a total value of € 258.

The Company's Management Board members held the following shares in the Company at December 31, 2008:

Name of holder	Ordinary shares held at December 31, 2008	% of total ordinary shares
R.H.P Brus	**154,202**	0.23%
L. Kruimer	**28,195**	0.04%
C. de Jong	**2,406**	0.01%
J. Goudsmit	**159,276**	0.24%
	344,079	**0.52%**

The following table describes loans granted to the members of Crucell's Management Board and senior management since January 1, 2001. Crucell has not granted any loans to any Supervisory Board members. The Company sets interest rates on these loans in relation to Dutch income tax law. The loans were granted to the persons listed below in connection with options granted to them on Crucell's ordinary shares. These loans become payable at the time shares received on exercise of the related options are sold or immediately in case the employee ceases to work for Crucell before this time. Crucell funds payments due under the loans prior to July 30, 2002, the date legislation was passed in the US prohibiting the granting of additional loans to company officers.

Name	Largest amount of loan outstanding since January 1, 2001	Amount of loan outstanding at December 31, 2008	2008 interest rate in %
R.H.P. Brus	132	87	3.5%
J. Goudsmit	25	—	3.5%
Other personnel	61	47	3.5%
		134	

The Group is not a party to any material transactions, or proposed transactions, in which any director, any executive officer, any spouse or relative of any of the foregoing, or any relative of any such spouse had, or was to have, a direct or indirect material interest other than those transactions disclosed in these financial statements.

Supervisory Board

Due to the fact that Crucell operates on a global scale with many of its supervisory directors used to the international arena, Crucell offers compensation to its supervisory directors in accordance with customary practice in the biotechnology sector.

From 2008 and onwards, compensation for all Supervisory Board members consists of a fixed fee in cash and an annual share grant. The fixed fee in cash ranges from € 34 to € 44 per Supervisory Board member. In addition, the chairman of the Supervisory Board is awarded annually a net allowance of € 5 that is grossed up for taxation purposes. The annual share grant awarded to each member of the Supervisory Board shall equal 2,500 ordinary shares. The amounts will be revised on a triennial basis. The shares should be held for as long as an individual is a member of the Supervisory Board. Instead of the share grant, a Supervisory Board member may also choose to receive a cash amount equalling the value of 2,500 shares at the date of grant minus 25%.

During 2008, 2007 and 2006, the individual members of the Supervisory Board were entitled to receive the following remuneration (excluding share-based payments – see information below on stock options and performance stock):

Year ended December 31,	2008	2007	2006
P. Strijkert(1)	—	—	16.7
J.P. Oosterveld(2)	54.2	60.8	38.7
A. Hoevenaars	35.0	25	25
S.P. Lance	34.0	25	25
P.M. Satow	35.0	25	25
C.E. Wilhelmsson	35.0	25	25
S. Davis	34.0	—	—
D.S. Koechlin(3)	12.5	25	25
J. Witmer(4)	—	10.4	25
C.E. Thomann(4)	—	10.4	25
Totals	239.7	206.6	230.4

(1) Mr. P. Strijkert resigned from the Supervisory Board on June 2, 2006.

(2) Mr. J.P. Oosterveld was appointed Chairman on June 2, 2006.

(3) Mr. D.S. Koechlin was appointed member of the Supervisory Board on June 2, 2006, but has attended meetings since January 2006. Mr. D.S. Koechlin resigned from the Supervisory Board on May 30, 2008.

(4) Mr. J. Witmer and Mr. C.E. Thomann were appointed member of the Supervisory Board on June 2, 2006, but have attended meetings since January 2006. Mr. J. Witmer and Mr. C.E. Thomann resigned from the Supervisory Board on June 1, 2007.

The Company's Supervisory Board members held the following options for the period ended December 31, 2008:

Name of Holder	Options held per December 31, 2007	Year of expiration	Exercise price €	Granted 2008	Exercised 2008	Forfeited 2008	Options held per December 31, 2008
J.P. Oosterveld	10,000	2009	8.81	—	—	—	10,000
	10,000	2009	11.55	—	—	—	10,000
S.P. Lance	10,000	2011	7.86	—	—	—	10,000
	10,000	2009	11.55	—	—	—	10,000
P.M. Satow	10,000	2009	11.55	—	—	—	10,000
	22,000	2011	3.49	—	—	—	22,000
	10,000	2011	6.48	—	—	—	10,000
C.E. Wilhelmsson	10,000	2009	11.55	—	—	—	10,000
	10,000	2011	6.48	—	—	—	10,000
A.Hoevenaars	5,000	2009	8.81	—	—	—	5,000
	10,000	2009	11.55	—	—	—	10,000
Totals	117,000			—	—	—	117,000

Crucell's Supervisory Board members held the following shares in the Company per December 31, 2008:

Name of holder	Ordinary shares held per December 31, 2008	% of total ordinary shares
J.P. Oosterveld	9,500	0.01%
A. Hoevenaars	7,500	0.01%
S.P. Lance	—	—
P.M. Satow	63,800	0.10%
C.E. Wilhelmsson	7,500	0.01%
S. Davis	—	—
	88,300	0.13%

Pursuant to Dutch law, each member of Crucell's Supervisory Board and Management Board is responsible to the Company for the proper performance of his or her assigned duties. They are also responsible for taking measures to prevent the consequences of any improper performance of duties by another member of Crucell's Supervisory Board or Crucell's Management Board. The Company's articles of association provide that Crucell's Management Board members and Crucell's Supervisory Board members are discharged from liability for their actions as board members, if Crucell's General Meeting of Shareholders adopts a resolution to that effect.

This discharge extends only to actions or omissions disclosed in or apparent from the adopted annual accounts or otherwise communicated to the Company's General Meeting of Shareholders.

Mandatory provisions of Dutch law may limit this discharge of liability, for example in the case of bankruptcy. Under Dutch law, the Company's Supervisory Board members and members of the Company's Management Board generally cannot be held personally liable for decisions made exercising their reasonable business judgment.

The Company's articles of association provide that the Company shall generally indemnify any person who is or was a member of the Company's Supervisory Board or of the Company's Management Board or one of the Company's employees, officers or agents, and suffers any loss as a result of any action in connection with their service to the Company, provided they acted in good faith in carrying out their duties.

This indemnification generally will not be available if the person seeking indemnification acted with gross negligence or wilful misconduct in the performance of his or her duties to the Company. A court in which an action is brought, may however determine that indemnification is appropriate nonetheless.