



ASTRAZENECA ANNUAL REPORT  
AND FORM 20-F INFORMATION 2008



**DIRECTORS' REPORT** 8**FINANCIAL STATEMENTS** 98**REMUNERATION REPORT** 174**ADDITIONAL INFORMATION** 190**IMPORTANT INFORMATION  
FOR READERS OF THIS REPORT****Cautionary statement regarding forward-looking statements**

The purpose of this Annual Report and Form 20-F Information is to provide information to the members of the Company. In order, among other things, to utilise the 'safe harbour' provisions of the US Private Securities Litigation Reform Act 1995 and the UK Companies Act 2006, we are providing the following cautionary statement: This Annual Report and Form 20-F Information contains certain forward-looking statements with respect to the operations, performance and financial condition of the Group. Although we believe our expectations are based on reasonable assumptions, any forward-looking statements, by their nature, involve risks and uncertainties and may be influenced by factors that could cause actual outcomes and results to

be materially different from those predicted. The forward-looking statements reflect knowledge and information available at the date of the preparation of this Annual Report and Form 20-F Information and the Company undertakes no obligation to update these forward-looking statements. We identify the forward-looking statements by using the words 'anticipates', 'believes', 'expects', 'intends' and similar expressions in such statements. Important factors that could cause actual results to differ materially from those contained in forward-looking statements, certain of which are beyond our control, include, among other things, those factors identified in the Principal Risks and Uncertainties section on pages 74 to 82 of this document. Nothing in this Annual Report and Form 20-F Information should be construed as a profit forecast.

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**Inclusion of reported, constant exchange rate and core financial measures**

Throughout the Directors' Report and in the Financial Highlights section on page 2 and 3 the following measures are referred to:

> Reported performance. Reported performance takes into account all the factors (including those which we cannot influence, principally currency exchange rates) that have affected the results of our business as reflected in our Group Financial Statements prepared in accordance with International Financial Reporting Standards as adopted by the European Union and as issued by the International Accounting Standards Board.

> Core financial measures. This is a non-GAAP measure because unlike reported performance it cannot be derived directly from the information in the Group's Financial Statements. This measure is adjusted to exclude certain significant items, such as charges

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and provisions related to restructuring and synergy programmes, amortisation and the impairment of the significant intangibles arising from corporate acquisitions and those related to our current and future exit arrangements with Merck in the US, and other specified items. A reconciliation between reported performance and core performance is provided on page 34.

> Constant exchange rate (CER) growth rates. This is also a non-GAAP measure. This measure removes the effects of currency movements (by retranslating the current year's performance at previous years' exchange rates and adjusting for other exchange effects, including hedging). A reconciliation of reported results adjusted for the impact of currency movements is provided on page 33.

Throughout this Annual Report and Form 20-F Information, growth rates are expressed at CER unless otherwise stated.

#### Statements of competitive position, growth rates and sales

In this Annual Report and Form 20-F Information, except as otherwise stated, market information regarding the position of our business or products relative to its or their competition is based upon published statistical sales data for the 12 months ended 30 September 2008 obtained from IMS Health, a leading supplier of statistical data to the pharmaceutical industry. For the US, dispensed new or total prescription data are taken from the IMS Health National Prescription Audit for the 12 months ended 31 December 2008. Except as otherwise stated, these market share and industry data from IMS Health have been derived by comparing our sales revenue to competitors' and total market sales revenues for that period. Except as otherwise stated, growth rates and sales are given at constant exchange rates. For the purposes of this Annual Report and Form 20-F Information, unless otherwise stated references to the world pharmaceutical market or similar phrases are to 52 countries contained in IMS Health MIDAS Quantum

database, which amounted to approximately 95% (in value) of the countries audited by IMS.

#### AstraZeneca websites

Information on or accessible through our websites, including [astrazeneca.com](http://astrazeneca.com), [astrazenecaclinicaltrials.com](http://astrazenecaclinicaltrials.com), [medimmune.com](http://medimmune.com) and [cambridgeantibody.com](http://cambridgeantibody.com), does not form part of this document.

#### External/third party websites

Information on or accessible through any third party or external website does not form part of this document.

## 2 ASTRAZENECA AND OUR YEAR IN BRIEF

ASTRAZENECA IS ONE OF THE WORLD'S LEADING PHARMACEUTICAL COMPANIES WITH A BROAD RANGE OF MEDICINES DESIGNED TO FIGHT DISEASE IN IMPORTANT AREAS OF HEALTHCARE. BACKED BY STRONG SCIENCE AND WIDE-RANGING COMMERCIAL SKILLS,

WE ARE COMMITTED TO THE SUSTAINABLE DEVELOPMENT OF OUR BUSINESS AND THE DELIVERY OF A FLOW OF NEW MEDICINES THAT BRING BENEFIT FOR PATIENTS AND CREATE ENDURING VALUE FOR OUR SHAREHOLDERS AND SOCIETY.

### FINANCIAL HIGHLIGHTS

#### SALES \$M

		GROWTH
08	31,601	+3%
07	29,559	+7%
06	26,475	+11%

#### OPERATING PROFIT \$M

		GROWTH
Core 08	10,958	+9%
Reported 08	9,144	+4%
Reported 07	8,094	-4%
Reported 06	8,216	+28%

#### CORE EARNINGS PER ORDINARY SHARE \$

		GROWTH
08	5.10	+8%
07	4.38	+10%
06	3.92	+33%

#### DISTRIBUTIONS TO SHAREHOLDERS:

#### DIVIDENDS AND SHARE RE-PURCHASES \$M

● DIVIDENDS	○ SHARE RE-PURCHASES
08 2,739	610)
07 2,641	4,170)
06 2,220	4,147)

#### DIVIDEND FOR 2008

	\$	Pence	SEK	Payment date
First interim dividend	0.55	27.8	3.34	15 September 2008
Second interim dividend	1.50	104.8	12.02	16 March 2009
Total	2.05	132.6	15.36	

#### PRODUCT PERFORMANCE SUMMARY \$M

##### NEXIUM -2%

08	5,200
07	5,216
06	5,182

##### SEROQUEL +9%

08	4,452
07	4,027
06	3,416

##### CRESTOR +26%

08	3,597
07	2,796
06	2,028

##### PULMICORT +0%

08	1,495
07	1,454
06	1,292

##### ATACAND +10%

08	1,471
07	1,287
06	1,110

##### CASODEX -12%

08	1,258
07	1,335
06	1,206

##### LOSEC/PRILOSEC -14%

08	1,055
07	1,143
06	1,371

##### MERREM +13%

08	897
07	773
06	604

##### SELOKEN/TOPROL-XL -46%

08	807
07	1,438
06	1,795

## 2008 IN BRIEF

> Sales up 3% to \$31,601 million.

> Crestor sales up 26% to \$3,597 million; *Symbicort* up 22% to \$2,004 million; *Seroquel* up 9% to \$4,452 million; and *Arimidex* up 4% to \$1,857 million. *Nexium* sales down 2% to \$5,200 million.

> Our product portfolio now includes 11 medicines with annual sales of more than \$1 billion each.

> Sales in Emerging Markets reached \$4,273 million for the full year, up 16%.

> Investment in R&D in line with 2007 at \$5.2 billion.

> Core operating profit up 9% to \$10,958 million.

> Core operating margin improved to 34.7% of sales on operational efficiencies in all functional areas.

> Core EPS for the full year increased by 8% to \$5.10.

> Reported EPS for the full year increased by 2%, reflecting higher intangible asset impairments and a full year of MedImmune amortisation compared with 2007.

> Dividend up 10% to \$2.05 for the full year.

> Cash distributions to shareholders totalled \$3,349 million (dividends \$2,739 million; share re-purchases \$610 million).

> Net debt reduced by \$1.9 billion on strong cash performance and investment discipline.

> Eight significant regulatory life-cycle management submissions; two product submissions. Phase III pipeline volume remains constant. Phase II pipeline increased by over 50%. Nominated 32 FGLPs and exceeded our target for progressing these into man.

> New initiatives extend the scope of restructuring programme to sustain long-term competitiveness.

> 35 significant business development transactions including extensions of existing agreements.

> Summary Judgment Motion granted to AstraZeneca in the patent infringement actions commenced against two generic drug manufacturers in the US following abbreviated new drug applications relating to *Seroquel*.

> Settlement of US *Nexium* patent litigation with enforceability of disputed *Nexium* patents conceded. Other patent litigation continuing in the US against generic manufacturers following abbreviated new drug applications relating to *Nexium*.

> New Code of Conduct launched in over 40 languages and all employees trained.

Growth rates expressed above are CER growth rates.

**REPORTED BASIC EARNINGS  
PER ORDINARY SHARE \$**

		GROWTH
08	4.20	+2%
07	3.74	-5%
06	3.86	+34%

**NET CASH FLOW  
FROM OPERATING ACTIVITIES \$M**

08	8,742
07	7,510
06	7,693

**SYMBICORT +22%**

08	2,004
07	1,575
06	1,184

**ARIMIDEX +4%**

08	1,857
07	1,730
06	1,508

**SYNAGIS<sup>1</sup> n/m**

08	1,230
07	618

**ZOLADEX -3%**

08	1,138
07	1,104
06	1,008

**FLUMIST<sup>1</sup> n/m**

08	104
07	53

<sup>1</sup> Acquired in June 2007.



During 2008, AstraZeneca maintained its strong focus on delivering benefit to patients and value to shareholders and society through industry-leading R&D productivity, commercial excellence and operational efficiency.

Group sales increased by 3% in 2008 to a total of \$31.6 billion. Operating profit was \$9.1 billion, up 4%. Reported earnings per share for the full year were \$4.20 (\$3.74 in 2007). The Board has recommended an 11% increase in the second interim dividend to \$1.50 (104.8 pence, SEK 12.02) per Ordinary Share. This brings the dividend for the full year to \$2.05 (132.6 pence, SEK 15.36), an increase of 10%. In 2008, cash distributions to shareholders, through a combination of dividends and share re-purchases totalled \$3,349 million. Share re-purchases for the full year amounted to \$610 million. Shareholders also benefited in 2008 from an improvement in the Company share price. The London-listed share price increased by 30% during the course of 2008, as compared to a decline of 31% for the FTSE 100 index.

During the year, we continued to invest in enhancing our R&D capabilities alongside accessing high quality opportunities externally. This investment is guided by our disease area strategy, which reflects both our inherent strengths and the areas of greatest unmet medical need. We now have a strong development portfolio of small molecule and biological products targeted at bringing new therapeutic approaches to important areas of healthcare as quickly and safely as possible. In particular, the improvements we have made to our cycle times mean that we should deliver new medicines to patients even faster.

We continued to drive sales growth despite continuing pricing and intellectual property challenges in our Established Markets. Managing the impact of challenges from generic manufacturers is now a key feature of our business. The Board was pleased to support the Senior Executive Team strategy of settling legal challenges concerning *Nexium* and *Pulmicort Respules*, rather than managing the continued cost and uncertainty associated with a sustained legal defence. Protecting our intellectual property ensures that we can re-invest in the discovery and development of the medicines of the future and we must manage this important asset actively and effectively over the long term.

We continued our investment in fast-growing economies to strengthen our platform for growth in key Emerging Markets, and, alongside the rest of the pharmaceutical industry, we continued to drive efficiencies across our organisation to support sustained shareholder returns.

In conjunction with the Senior Executive Team, during 2008 the Board reviewed the Group's strategy. This review reinforced our commitment to delivering differentiated medicines that make a meaningful difference to patients' lives and to doing so in an efficient, focused, cost-effective and responsible manner. More information about the work and operation of the Board and its Committees is set out in the Business Organisation and Corporate Governance section of this Report.

In February and September 2008 we announced the appointments of Jean-Philippe Courtois and Rudy Markham respectively. Jean-Philippe's considerable experience with Microsoft in global sales and marketing, including Emerging Markets, will be of great benefit to the work of the Board. Rudy's considerable experience of over 35 years at Unilever, latterly in finance, will also be invaluable to the work of the Board and to the Audit Committee.

In November 2008, we announced the retirement of John Patterson who will leave the Company after 34 years of service and will retire from the Board on 31 March 2009. John has made an important and highly valued contribution to the business over the course of his career with AstraZeneca and over the last five years as a member of the Board.

At the end of 2008, Graeme Musker stepped down from his position as Group Secretary and Solicitor, and will retire in early 2009. The Board appointed Adrian Kemp to the position of Company Secretary with effect from 1 January 2009. On behalf of the Board, I would like to thank Graeme for his 30 years' of invaluable service, advice and guidance to the Board and the Company.

The Board continues to be confident in the strong leadership of David Brennan and his Senior Executive Team and would like to thank them and all AstraZeneca's employees for their hard work and dedication, which underpins the Company's success.

The fundamentals of the world pharmaceutical market remain robust. Although industry growth is slowing, mainly due to ever-greater pressure on costs and increased generic competition, the continued demand for healthcare that underpins the industry's future growth prospects remains strong. The pharmaceutical industry is also arguably less exposed than other sectors to the current global economic downturn, although some impact may result from increased constraints on payers, suppliers and distributors.

Nevertheless, our rapidly changing business environment will continue to be a challenging one. The companies that will be most successful will be those that are able to manage the risks and maximise the opportunities effectively, through timely and efficient investment, appropriate use of intellectual property and constructive stakeholder engagement. I am confident that AstraZeneca is such a company and that, with our clear strategy, strong leadership and intense focus on execution, we will continue to deliver sustainable success, to the benefit of patients, shareholders and society.

**LOUIS SCHWEITZER**  
Chairman

# CHIEF EXECUTIVE OFFICER'S REVIEW



We are committed to delivering on our strategy and to changing the way we work so we are prepared for the future. 2008 was a year of both opportunity and challenge for the Company. I am proud to report that we delivered some significant successes against a tough background of slowing growth rates in Established Markets, ever-greater pressure on costs and increasing challenge from generic manufacturers.

Our strategy is clear. At its simplest, it is to create enduring value for shareholders by delivering medicines that make a meaningful difference to patient health.

Our vision is to be an innovation-driven, research-based pharmaceutical company focused on human health and capable of delivering a consistent flow of innovative and differentiated products to patients in markets around the world. To achieve this we will make sustained investment in an industry-leading, externally networked R&D organisation with expertise in both small molecule and large molecule technologies. We will commercialise our products rapidly and globally at affordable prices through a world class sales and marketing organisation operating in both primary and specialty care markets.

Underpinning our research and commercial operations will be a supply chain and operating infrastructure, through which we are aiming to achieve industry-leading efficiency.

Above all, we will seek to apply an investment discipline to all of our activities that attaches equal weight to delivering patient health and creating shareholder wealth. We will only invest shareholders' funds where we see attractive returns and the opportunity to create enduring shareholder value.

To help the organisation maintain our focus on execution, our strategy targets four main priorities:

## STRENGTHENING OUR PIPELINE

We are discovering and developing effective medicines faster than ever before and the considerable progress we have made in reducing development cycle times and costs has been achieved without compromising on safety and quality.

During 2008, we made eight significant regulatory submissions across several jurisdictions to broaden the use of our marketed products *Seroquel*, *Symbicort*, *Iressa* and *FluMist*, as well as two new product submissions for motavizumab, an improved anti-respiratory syncytial virus monoclonal antibody, and *Onglyza*™, for treating Type 2 diabetes. We have strengthened our mid-stage pipeline and now have 10 projects in Phase III development. 32 projects entered the pipeline during the year and 44 projects were progressed to their next phase of development. We now have a total of 144 projects within a balanced pipeline of small molecule and biological products. This compares with 137 projects in 2007.

We also continue to pursue high quality external opportunities to enhance further our in-house capabilities and have completed over 40 major deals in the last two years. These deals have increased the quality and size of our pipeline and improved the prospects of consistently launching more new medicines each year as the pipeline matures.

## GROWING THE BUSINESS

Backed by our 70 year track record of innovation, we have a range of medicines on the market that continue to make a difference in important areas of healthcare – and our commitment to delivering the full benefit of these medicines to patients and maximising their commercial potential remains undiminished.

Highlights of the year included the conclusion of a major study of our statin, *Crestor*, in the primary prevention area, which demonstrated significant reduction in major cardiovascular events – 44% compared to placebo in men and women with elevated hsCRP and other risk factors but low/normal cholesterol levels, a level of cardiovascular risk reduction not previously seen in a large placebo controlled statin outcome trial.

*Seroquel XR* has had approvals for acute bipolar depression, acute bipolar mania and as an adjunct therapy to lithium or divalproex for bipolar maintenance treatment in a number of major jurisdictions. These approvals for new indications put *Seroquel XR* on track to deliver its full therapeutic potential.

In addition, our expertise in regulatory, sales and marketing is also helping to bring to markets outside the US the biological products that MedImmune brought to our range, specifically motavizumab and *FluMist*.

Despite the challenging market conditions, we have continued to drive high performance and market share gains in our Established Markets and increased sales across North America, Europe and Japan. I believe our sales forces are among the best and we continue to evolve our commercial model to ensure that we stay at the forefront of best practice in meeting the needs of our customers.

We continue to deliver strong, profitable growth in our Emerging Markets, while continuing our strategic investment in these markets aimed at ensuring that we are appropriately resourced to deliver the full potential of the business opportunities in these developing economies. One in seven dollars of our sales now comes from Emerging Markets and as our presence in these countries matures, and as their economies strengthen, I am confident that we will be able to increase further business efficiency and deliver improved profitability in the future.

We received further challenges to some of our patents during the year, the details of which are set out elsewhere in this Report. We will continue to vigorously defend our patents to protect the many years of research and the considerable investment which have delivered the medicines to which those patents relate.

## BECOMING LEAN AND AGILE

We have to be relentless in our pursuit of opportunities to drive further efficiencies across the value chain. As well as the progress delivered in R&D, we have reshaped our manufacturing and packing activities to improve productivity whilst maintaining high standards of quality and security; we have established agreements with third parties who offer specialist outsourced expertise in areas ranging from data management to catering; and put even greater focus on leveraging efficiencies within our global procurement activity.

Our continuing drive to improve efficiency and effectiveness resulted in further planned reductions of our workforce in some areas of our business during 2008 and our work on these initiatives continues. My management teams and I, take these changes very seriously and remain committed to ensuring that we manage these changes in line with our core values. Throughout, we have consulted with staff representatives and acted in line with local labour laws. We have also provided appropriate support to help individuals pursue their careers beyond AstraZeneca and have engaged with communities around the affected sites to mitigate the local impact.

#### **DOING BUSINESS THE RIGHT WAY**

I want AstraZeneca to be valued as a source of great medicines, but also to be trusted for the way in which we do business. Therefore, our strategic focus includes a fourth priority, which underpins and supports achievement of the first three. We must continue to nurture a culture of responsibility and accountability across all aspects of our business activity to ensure that AstraZeneca continues to be welcomed as a trusted member of society.

Our core values are the cornerstone of this culture and in 2007, we reviewed and expanded our Code of Conduct to provide clear direction as to how these high level values are to be translated into consistent actions across all areas of our business. The new Code went into effect in 2008, and it was followed by mandatory training during the year for everyone in the Company.

During the year, 86% of our employees participated in our global employee opinion survey. Results showed that employee engagement scores – defined as the extent to which people are committed to the future success of the Company – were very strong, and we continue to outperform other pharmaceutical companies in this area. The results also indicated that people were seeing increased levels of co-operation between senior leaders, leading to more effective global and cross-functional working. The survey also identified some key areas that continue to require attention, including change management, personal development and leadership communication. I take this feedback very seriously and new targets that address these issues have been included in the Senior Executive Team's performance goals for 2009.

#### **SENIOR EXECUTIVE TEAM (SET) CHANGES**

I am delighted that we have further strengthened the SET through the appointments of Anders Ekblom and Jeff Pott. Anders was appointed to the role of Executive Vice-President, Development with effect from 1 January 2009. Jeff has already taken up his new role as the Group's General Counsel, having spent a number of years as legal counsel within AstraZeneca's US business, most recently with responsibility for managing intellectual property litigation within the US.

During 2008 we announced that, after a long and distinguished career within the Company, John Patterson, Executive Director, Development, will retire at the end of March 2009. John has made an important and lasting contribution to the business over the course of his career with AstraZeneca. Under his leadership, the productivity and efficiency of our product development has improved significantly, and we now have the largest pipeline in our history. Also in 2008, David Mott, formerly President of MedImmune left the Company to pursue other opportunities. The role of President of MedImmune has been taken on by Tony Zook, who has also retained his responsibilities as Chief Executive Officer, North America and Executive Vice-President, Global Marketing.

#### **LOOKING AHEAD**

Despite the very significant and economic challenges being experienced around the world, I am confident the progress that we continue to make in our four priority areas means AstraZeneca is well placed to manage the challenges and opportunities of a rapidly changing business environment. I believe that we have the strategy, the engines for growth and the levels of commitment it takes to continue making a meaningful difference in patient health through great medicines, and creating enduring value for our shareholders and society.



**DAVID R BRENNAN**  
Chief Executive Officer



**DIRECTORS' REPORT**

## ASTRAZENECA IN BRIEF

- > Focused on the discovery, development, manufacturing and marketing of prescription pharmaceuticals and biological products for important areas of healthcare: Cardiovascular, Gastrointestinal, Infection, Neuroscience, Oncology, and Respiratory and Inflammation.
- > Broad product range, including many world leaders and a number of key products: *Arimidex, Crestor, Nexium, Seroquel and Symbicort*.
- > Active in over 100 countries with a growing presence in important emerging markets including China; corporate office in London, UK; major R&D sites in Sweden, the UK and the US.
- > Over 65,000 employees (51% in Europe, 32% in the Americas and 17% in Asia, Africa and Australasia).
- > Around 12,000 people in our R&D organisation and 17 principal R&D centres in eight countries.
- > 26 manufacturing sites in 18 countries.
- > Committed to a responsible approach to business across all activities.

In this Directors' Report, we have applied the best practice principles of an Operating and Financial Review and, to demonstrate how we have performed our duty to promote the success of the Company, we discuss the main trends and factors underlying the development, performance and position of AstraZeneca in 2008.

We summarise the opportunities and challenges of our business environment, including the world market for pharmaceuticals and biological products; the competitive and regulatory environment; and the principal risks and uncertainties we face, as well as the importance of intellectual property rights.

We describe our strategy for creating enduring value for shareholders, patients and other stakeholders and explain how our progress towards achieving our strategic goals is measured.

We provide an overview of the resources, skills and capabilities that we have in place and how they are aligned to the achievement of our goals. This includes information about the ways in which our medicines are differentiated and effective, as well as details of our research and development, sales and marketing, and supply and manufacturing activities worldwide. We also describe our commitment to ensuring that our global workforce continues to be motivated and clear about what is required of them as we drive the continued success of our business.

In the Financial Review, we report our global financial results for 2008 with our comparative 2007 results and we highlight our key accounting policies and our approach to financial risk management.

In the Geographical Review, we report on our global financial performance at a product level and in different geographical areas, with our comparative 2007 performance.

The Therapy Area Review provides additional information about our areas of interest, including why we are focused on particular diseases, our goals and our progress towards achieving them. As part of this, we report in detail on our pipeline of potential new products and life-cycle developments of our marketed medicines.

We highlight the importance of leadership, effective decision-making and risk management, and include a summary of our business organisation and the various responsibilities and processes in place for ensuring the integrity of financial information, internal controls and risk management.

As a global, research-based pharmaceutical company, we face a diverse range of risks and uncertainties that may affect our business. We work continuously to ensure that we have appropriate and effective processes in place for identifying, assessing and managing these risks, in line with our strategic objectives, the material needs of our stakeholders and our core values. In the Risk section, we describe our key risk management and assurance mechanisms, together with the principal areas of risks and uncertainties that we currently consider to be material to our business. Where relevant, specific risks and uncertainties are also discussed at various points throughout this Directors' Report.

Stakeholder expectations of the industry regarding corporate responsibility continue to vary from country to country. Nevertheless, a global business means global visibility and there are a number of issues relating to our business that have the potential to impact our reputation anywhere in the world. These include patient safety, access to medicines, sales and marketing practices, research ethics, employment practices and the environment. We provide information throughout this Directors' Report about our position on key issues, and about our approach to managing the challenges and opportunities associated with our corporate responsibility to ensure that we continue to be led by our core values to achieve sustainable success. Further information about our commitment to responsible business, our position on the issues and our performance is available on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

The Shareholder Information and Corporate Information sections starting on pages 190 and 197 respectively, are incorporated into this Directors' Report.

The Glossary and the Market Definition Table (from page 199) provide a useful guide to terms, as well as acronyms and abbreviations, used in this Directors' Report.

# BUSINESS ENVIRONMENT

AstraZeneca operates in a dynamic and rapidly changing business environment that presents both opportunities and challenges for our industry. The most successful pharmaceutical companies will be those that are able to manage effectively the risks and maximise the opportunities through timely and efficient investment, full use of intellectual property and constructive engagement with stakeholders.

The fundamentals of the world pharmaceutical market remain robust. Although industry revenue growth is slowing, mainly due to ever-greater pressure on healthcare costs, pricing and increased generic competition, the demand for healthcare that underpins the industry's future growth remains strong.

The pharmaceutical industry is arguably less exposed than other sectors to the current global economic downturn, although some impact may result from increased constraints on payers, suppliers and distributors. At the same time, there may also be opportunities, such as strategic partnerships with smaller companies seeking funding.

## WORLD MARKETS

The world pharmaceutical market in 2008 was valued at \$689 billion – an increase of 5% at CER (2007: 7%). Overall growth was constrained by a significant slow-down in the US even though growth in other Established ROW was maintained and growth in Emerging ROW, in particular Emerging Asia Pacific, was strong.

Despite its slower growth, the US remains the largest pharmaceutical market in the world, representing 42% of the global sales total (2007: 46%). The order of the top ten countries ranked by market size did not change in 2008 but, Poland, Australia and Turkey moved up the overall top 20 rankings.

## WORLD PHARMACEUTICAL MARKETS

	Sales \$bn	Growth %	Market value %
<b>Emerging ROW</b>			
2008	108	14	16
2007	87	13	14
2006	74	12	13
<b>Established ROW</b>			
2008	271	5	39
2007	232	4	37
2006	211	4	37
<b>North America</b>			
2008	310	2	45
2007	304	7	49
2006	284	7	50

Data based on world market sales using AstraZeneca market definitions as set out in the Glossary on page 199.

## WORLD RANKINGS BY COUNTRY

	Rank MAT/Q3/08	Rank MAT/Q3/07	Growth MAT/Q3/08 %	Growth MAT/Q3/07 %	Market Share MAT/Q3/08 %	Sales MAT/Q3/08 \$bn
US	1	1	1	7	42	291
Japan	2	2	4	2	9	65
France	3	3	4	5	6	43
Germany	4	4	6	3	6	42
Italy	5	6	4	–	4	26
UK	6	5	2	5	3	23
Spain	7	7	8	8	3	23
Canada	8	8	6	7	3	19
China <sup>1</sup>	9	9	27	21	3	18
Brazil <sup>2</sup>	10	10	12	10	2	13
Turkey <sup>2</sup>	11	13	9	18	2	10
South Korea	12	11	11	10	1	10
Australia	13	14	11	8	1	9
Mexico <sup>2</sup>	14	12	4	8	1	9
India <sup>2</sup>	15	15	13	13	1	7
Poland	16	17	9	8	1	7
Netherlands	17	16	5	8	1	7
Belgium	18	18	8	4	1	6
Greece <sup>2</sup>	19	19	12	18	1	6
Sweden	20	20	6	6	1	4

Data based on world retail and hospital pharmacy sales except:

<sup>1</sup>Hospital pharmacy only

<sup>2</sup>Retail pharmacy only

MAT = Moving Annual Total

Source: IMS Health 2008 MIDAS Quantum

## EXPANDING PATIENT POPULATIONS



### DEVELOPED MARKETS

Population: 893 million  
GDP growth<sup>1</sup>: 2.5%  
GDP/CAP<sup>2</sup>: \$38,376  
Pharma Market: \$562 billion

### EMERGING MARKETS

Population: 5,638 million  
GDP growth<sup>1</sup>: 6.8%  
GDP/CAP<sup>2</sup>: \$2,564  
Pharma Market: \$153 billion

<sup>1</sup> Real compound annual growth rate for years 2002-2007  
<sup>2</sup> 2007 data

GDP: Gross Domestic Product  
CAP: Per Capita  
Source: IHS Global Insight

## THE GROWTH DRIVERS

- > Increasing and ageing populations in established markets.
- > Emergence of expanded patient populations in new markets.
- > Continued unmet medical need.
- > Continued scientific and technological advance.

### EXPANDING PATIENT POPULATIONS

The world population has doubled in the last 50 years from three billion to over six billion and is expected to reach nine billion by 2050.

There are an increasing number of people who can access the highest standards of healthcare, especially among the elderly, who represent a rising proportion of developed nations' populations. In addition, the fast-developing economies, such as China and Brazil, continue to offer new opportunities for the industry to gain access to an expanding number of patients who can benefit from medicines.

Emerging markets currently represent 85% of the world population and 20% of the total pharmaceutical market. Fuelled by faster GDP growth than in developed nations, pharmaceutical industry growth in emerging markets was in 2008 double the rate of that in established markets (World Pharmaceutical Market Values table on page 9).

### UNMET MEDICAL NEED

In most established markets, ageing populations, more sedentary lifestyles and the availability of improved detection

techniques are leading to an increased incidence and diagnosis of chronic diseases, such as cancer and diabetes, which require long-term management. Chronic disease is on the increase in middle-income countries too, and is also beginning to have an impact in the least developed countries.

Many diseases remain under-diagnosed, sub-optimally treated or do not have effective therapies. Projections indicate that global mortality and the burden of disease will continue to increase over the next 20 years, mainly in non-communicable disease areas<sup>3</sup>. The leading causes of death globally in 2030 are predicted to include ischaemic heart disease, cerebrovascular disease, chronic obstructive pulmonary disease (COPD), lower respiratory infections, lung cancer and diabetes.

At AstraZeneca, we are focused on six therapy areas: Cardiovascular, Gastrointestinal, Infection, Neuroscience, Oncology, and Respiratory and Inflammation, which together represent a significant proportion of the worldwide burden of disease. Details about the therapy environment in each of our areas of interest are provided in the Therapy Area Review (page 53).

### SCIENCE AND TECHNOLOGY ADVANCES

The demand for healthcare will be met not only by existing therapies, but also by innovation resulting from advances in both the understanding of disease and the application of new technologies. Small molecule R&D remains a significant aspect of the pharmaceutical business, although the importance of large molecules or biologics is increasing. Advances in science are paying back in increased understanding of the key

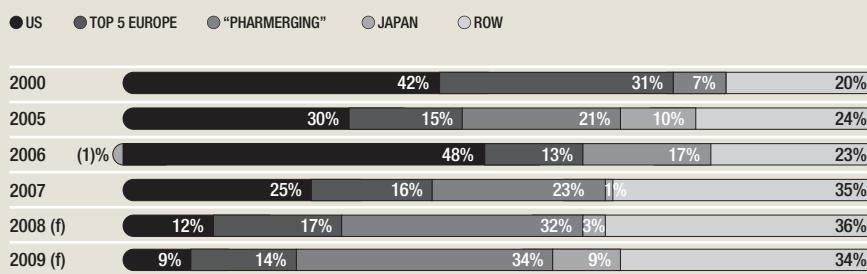
processes involved in the initiation and progression of disease. Together with advances in the technologies for the design and testing of novel compounds, this is enabling new opportunities for the delivery of innovative small molecules as therapeutic agents.

It has been predicted that within the world's top 100 products, 44% of sales will come from products produced using biotechnology, based on forecasts for 2012. This compares to only 25% in 2007 and 11% in 2000. The rate of growth for biologics has been faster than the small molecule segment in recent years and this trend is forecast to continue in the immediate future.

Biotechnology techniques are used to modify an organism's genetic material at the cellular or molecular level to produce biotechnology-derived products, which include monoclonal antibodies and vaccines, and are often referred to as large molecules in comparison to chemical compounds that are referenced as small molecules. Biologics are often more complex to manufacture than small molecule therapies because they are made by generating biological material from cells. The regulatory regimes for 'biosimilars' (similar versions of existing biological products or vaccines) are less well established than those for generic pharmaceuticals, although regulatory authorities in Europe and the US are currently reviewing approval processes. Difficulties producing an identical copy of a biological drug mean that, for biologics, generic competition has been less prevalent. These factors can help to deliver longer product life-cycles for biologics compared to traditional pharmaceuticals.

<sup>3</sup> Source: WHO statistics 2008.

## CONTRIBUTION TO GLOBAL GROWTH BY KEY REGIONS



"Pharmerging" markets include: China, Brazil, India, South Korea, Mexico, Turkey and Russia.

(f) = forecast – complete 2008 data unavailable at the date of publication of this Report.

Source: IMS Health, Market Prognosis, September 2008.

## THE CHALLENGES

- > Continued pressure on the price of medicines.
- > Higher regulatory hurdles for new medicines and new indications.
- > Competition from research-based and, increasingly, generic pharmaceutical companies.

## PRICING PRESSURE

The growing demand for healthcare means ever-increasing pressure on healthcare budgets and, whilst payers recognise the need to reward innovation, they have a duty to spend their limited financial resources wisely. Cost-containment, including pharmaceutical spending, therefore continues to be a fundamental consideration. The current global economic downturn is likely to further constrain healthcare providers and those patients who pay directly for their medicines, and additional challenges may arise if suppliers and distributors face credit-related difficulties.

The research-based pharmaceutical industry's challenge is to manage the associated downward pressure on the price of its products, whilst continuing to invest in the discovery, development, manufacturing and marketing of new medicines.

Most of our sales are generated in highly regulated markets where governments exert various levels of control on price and reimbursement. The network of pricing systems creates a complex matrix that must be managed to optimise revenues. This may be further complicated by currency fluctuations within regions. The principal aspects of price regulation in the major markets are described more in the Geographical Review from page 48.

Payers also increasingly require demonstration of the economic as well as therapeutic value of medicines. Meeting these needs across a diverse range of national and local reimbursement systems requires significant additional resources.

## REGULATORY REQUIREMENTS

The pharmaceutical industry is one of the most regulated of all industries and, whilst efforts to harmonise regulations globally are increasing, the number and impact of these regulations continue to grow. Regulatory drug review and approval is a complex and time consuming process, typically taking between six months and two years. In recent years, regulatory processes have become subject to more conditions including patient risk management plans, patient registries, post-marketing requirements, and conditional and limited approvals.

Traditional clinical trials designed to establish safety and efficacy remain a core component of drug development programmes but regulators are increasingly requiring that programmes also clearly demonstrate the benefits and risks of new medicine in the context of other available therapies, as well as demonstrating long-term medical outcomes, such as survival and quality of life improvements.

In addition to safety and efficacy, pre-approval regulation covers every aspect of the product including the chemical composition, manufacturing, quality controls, handling, packaging, labelling, distribution, promotion and marketing. Post approval and launch, all aspects relating to a product's safety, efficacy and quality must continue to meet regulatory requirements. See also Ensuring Product Quality (page 27).

## COMPETITION

Our main competitors are other international, research-based pharmaceutical companies that sell innovative, patent-protected, prescription medicines. Following patent expiry, our products also compete with generic pharmaceuticals. Since generic manufacturers do not bear the same high costs of R&D, nor do they typically invest as significantly in safety monitoring or marketing, they typically adopt lower prices for their products.

The generic industry is increasingly challenging innovators' patents and in the US, the world's largest pharmaceutical market, many leading medicines have faced or are facing patent challenges from generic manufacturers. The research-based industry is also experiencing increased challenges elsewhere in the world, for example in Europe, Canada, Asia and Latin America. It is increasingly complex to enforce patent rights and other intellectual property in certain markets, especially those where practices are in place to encourage broad access to medicines. While there are few established regulatory systems for biosimilars of biological products, several markets, including the US, are considering regulatory structures that might allow for an abbreviated marketing approval mechanism akin to that for generic pharmaceuticals. Further information about the risk of the early loss and expiry of patents is explained in the Intellectual Property section on page 26.

Competition also comes from collaborations and partnerships between traditional pharmaceutical companies and smaller biotechnology and vaccine companies. Increasingly, as pharmaceutical companies seek to expand their pipeline, they are able to gain access to promising new product candidates by partnering with these smaller companies that may lack some of the infrastructure for growth that a larger company can provide. Competition for high quality collaborations is increasingly fierce as the major pharmaceutical companies frequently focus on the same opportunities to enhance their in-house capabilities.

Further information about the principal risks and uncertainties we face can be found in the Risk section from page 74.

# 12 STRATEGY, GOALS AND PERFORMANCE MEASUREMENT

**ASTRAZENECA IS AN INNOVATION-DRIVEN, INTEGRATED, GLOBAL PHARMACEUTICAL COMPANY. OUR MISSION IS TO MAKE THE MOST MEANINGFUL DIFFERENCE TO PATIENT HEALTH THROUGH GREAT MEDICINES, AND TO CREATE ENDURING VALUE FOR OUR SHAREHOLDERS AND SOCIETY THROUGH INDUSTRY-LEADING R&D PRODUCTIVITY, COMMERCIAL EXCELLENCE AND OPERATIONAL EFFICIENCY.**

Our strategy centres on four main priorities: strengthen the pipeline, grow the business, re-shape the business and promote a culture of responsibility and accountability. These priorities are described in this table, together with details of our objectives; the measures we use to assess our progress; the initiatives in place to drive achievement of our objectives; and a summary of our 2008 performance.

STRATEGIC PRIORITY	OBJECTIVES	MEASURES
<b>STRENGTHEN THE PIPELINE</b>	<p>To be one of the fastest and most productive companies in the industry through continuous improvement in our research and development (R&amp;D), coupled with externalisation to broaden our research base and further strengthen our pipeline of new products.</p> <p>In order to achieve the above objective, ensure that we have 10 or more NMEs in Phase III development by 2010.</p>	<p>Achieve a median composite eight-year product development cycle by 2010.</p> <p>Deliver two new molecular entity (NME) launches on average per year from 2010.</p>
<b>GROW THE BUSINESS</b>	<p>To maintain our position among the industry world leaders through a continued focus on driving commercial excellence.</p>	<p>Deliver overall sales growth in line with market growth.</p> <p>Deliver target sales growth in key markets.</p> <p>Ensure profitable launch of our own and our in-licensed products.</p>
<b>RE-SHAPE THE BUSINESS</b>	<p>To create an organisation with the flexibility and financial strength to adapt quickly and effectively within a challenging and rapidly changing business environment.</p>	<p>Maintain gross profit margin.</p> <p>Efficiently deliver on R&amp;D investment.</p> <p>Achieve upper quartile industry performance in relation to selling, general and administrative (SG&amp;A) costs.</p> <p>Deliver procurement savings targets.</p>
<b>PROMOTE A CULTURE OF RESPONSIBILITY AND ACCOUNTABILITY</b>	<p>To create an organisation that is recognised not only for the skills, experience and quality of its people, but also for the integrity with which it conducts its business.</p>	<p>Achieve upper quartile industry ranking for employee engagement.</p> <p>Ensure that a culture of responsible business, including compliance, is embedded across all of our activities.</p> <p>Ensure that our reputation is favourable and supports our continued success.</p>

## INITIATIVES

## 2008 PERFORMANCE SUMMARY

Improving R&D quality and speed through leading-edge science, effective risk management and decision-making, and overall business efficiency.

Maximising the value of our biologics business and continuing to build a major presence in this fast-growing sector.

Investing in external opportunities to enhance our internal innovation through in-licensing, alliances and acquisitions.

2008 target exceeded for small molecule development cycle times. See page 19.

NME and life-cycle management progressions delivered. See page 19.

Industry top quartile for speed and cost efficiencies achieved in Discovery. See page 18.

Eight significant regulatory packages delivered, broadening the use of *Seroquel*, *Iressa*, *Symbicort* and *FluMist* across several jurisdictions. Two new product submissions delivered.

Overall pipeline volume increased by 5% and in-phase distribution of our projects has improved: FGLP (32); Phase I (34); Phase II (31); Phase III (10); Life-cycle management (23). See pages 22 to 24.

Over 300 Discovery collaborations/partnerships to access new science and technology platforms.

21 in-licensing deals, alliances and collaborations successfully concluded. See page 19.

R&D investment \$5.2 billion.

Active and rigorous development of our brands to maximise patient benefit and commercial potential.

Driving high standards of sales force effectiveness, marketing excellence and customer support.

Building on our leadership positions in existing markets and expanding our presence in important emerging ones.

Securing new external commercial collaborations that further strengthen our platform for future business growth.

Global sales +3% at CER.

Sales by region at CER: North America +2%; US +1%; Established ROW +2%; Emerging ROW +16%. See page 48.

Sales by key product at CER: *Arimidex* +4%; *Crestor* +26%; *Nexium* -2%; *Seroquel* +9%; *Symbicort* +22%. See page 2.

Two US co-promotion agreements secured and 12 disposal transactions to extract value from deprioritised and non-core assets. See page 19.

Continued implementation and expansion of our restructuring programme, including:

- > Reviewing supply and manufacturing assets.
- > Driving R&D efficiency.
- > Driving sales and marketing resource optimisation and customer focus.
- > Implementing restructuring and efficiency programmes in corporate functions.

Core gross margin: 80.4%

Core operating margin: 34.7%

On track to deliver R&D unit cost reduction target of 15% over three years.

Core SG&A cost growth rate: 3%

Restructuring programme continues with benefits now estimated to reach \$2.5 billion per annum (up from \$1.4 billion); with \$2.1 billion in savings expected before 2010, and the balance to be realised by 2013.

Procurement savings on track to achieve target.

Strengthening the effectiveness of leaders and our performance management.

Maintaining/improving levels of employee engagement.

Investing in leadership development to improve accountability and collaboration.

Integrating responsible business considerations into everyday business thinking and decision-making.

Global employee survey shows employee engagement is strong, outperforming many other pharmaceutical companies. See page 28.

15 confirmed breaches of external sales and marketing regulations or codes. See page 25.

Positioned amongst the top 6% of companies in the sector in the Dow Jones World and STOXX (European) Sustainability Indexes.

376,000 animals used in research (preliminary figures). See page 20.

1.22 million tonnes CO<sub>2</sub> equivalents (39 tonnes/\$million sales). See page 71.

22 tonnes ODP emissions (0.71kg/\$million sales). See page 71.

2.28 accidents with serious injury per million hours worked. See page 29.

1.04 cases of occupational illness per million hours worked. See page 29.

## MEASURING OUR PERFORMANCE

Each business function is subject to an annual budget and target-setting process that includes developing financial and business forecasts, conducting sensitivity and risk analyses and setting relevant performance measures. Reviews are undertaken in each part of the business in order to monitor and assess progress against business and budget targets, and to assess key risks and mitigating actions. Longer-term, 10-year forecasts are developed as part of our annual strategy review.

Quarterly internal reports provide the Board and Senior Executive Team (SET) members with shared insight into current progress against short-term financial and non-financial objectives and current year milestones for longer-term strategic goals.

Performance is assessed using quantitative, comparative market, operational and financial measures and more qualitative analysis. These measures align with the four main priorities of our strategy and together they provide the framework for consistently monitoring and reporting our progress towards achieving our objectives and ultimately delivering enduring shareholder value.

Specific measures that our Board and SET use when assessing business performance, or that are otherwise judged to be helpful in enabling shareholders to better understand and evaluate our business, are described and illustrated throughout this Report. The key measures in each of our four main priority areas are shown in the table on page 12.

In relation to our overall goal of creating enduring value for shareholders by being one of the best-performing pharmaceutical companies, we track shareholder value using the following financial performance metrics: sales growth, operating profit and margins; core and reported earnings per share growth; net operating cash flow (before debt repayment and shareholder distributions); shareholder distributions through dividends and share re-purchases; and total shareholder returns. We report our performance against those measures either in the Financial Highlights on page 2 or in the Financial Review from page 31 with total shareholder return reported on page 184.

## REPORTING OUR PERFORMANCE – FINANCIAL

### SALES BY KEY AND BASE PRODUCTS \$M

	KEY PRODUCTS (ARIMIDEX, CRESTOR, NEXIUM, SEROQUEL AND SYMBICORT)	BASE PRODUCTS	TOTAL
08	17,110 (+9%)	14,491 (-2%)	31,601
07	15,344 (+11%)	14,215 (+3%)	29,559
06	13,318 (+23%)	13,157 (+1%)	26,475
05	10,849 (+27%)	13,101 (-1%)	23,950
04	8,426 (+36%)	13,000 (-4%)	21,426

### SALES BY REGION \$M

	NORTH AMERICA	ESTABLISHED ROW	EMERGING ROW	TOTAL
08	14,785	12,543	4,273	31,601
07	14,511	11,491	3,557	29,559
06	13,480	10,131	2,864	26,475

### GROSS MARGIN \$M

	Core 08	Reported 08	Reported 07	Reported 06	% OF SALES
	25,408	25,003	23,140	20,916	80.4%

### OPERATING PROFIT MARGIN \$M

	Core 08	Reported 08	Reported 07	Reported 06	% OF SALES
	10,958	9,144	8,094	8,216	34.7%

### R&D INVESTMENT \$M

	Core 08	Reported 08	Reported 07	Reported 06	% OF SALES
	4,953	5,179	5,162	3,902	15.7%

## REPORTING OUR PERFORMANCE – NON-FINANCIAL

### ASTRAZENECA EMPLOYEES: ACCIDENTS WITH SERIOUS INJURY (PER MILLION HOURS)<sup>1,2</sup>

08	2.28
07	2.65
06	2.37

### ASTRAZENECA EMPLOYEES: CASES OF OCCUPATIONAL ILLNESS (PER MILLION HOURS)<sup>1</sup>

08	1.04
07	0.99
06	0.97

### SALES AND MARKETING: NUMBER OF CONFIRMED BREACHES<sup>3</sup>

08	15
07	32
06	44

### NUMBER OF ANIMALS USED IN RESEARCH '000

08	376 <sup>4,5</sup>
07	285
06	288

### GREENHOUSE GAS EMISSIONS<sup>1</sup>

	2008	2007	2006
CO <sub>2</sub> -equivalents (million tonnes)	1.22	1.29	1.31
Index (tonnes/\$million sales)	39	44	50

Figures are calculated in line with the Greenhouse Gas (GhG) Protocol guidance (ghgprotocol.org)

### OZONE DEPLETION POTENTIAL EMISSIONS<sup>1</sup>

	2008	2007	2006
CFC11-equivalents (tonnes)	22	36	40
Index (kg/\$million sales)	0.71	1.2	1.5

Source data for calculation of CFC figures is AstraZeneca sales data

<sup>1</sup> Data excludes MedImmune.

<sup>2</sup> With and without days lost.

<sup>3</sup> Of codes or regulations ruled by external bodies.

<sup>4</sup> Data includes MedImmune, KuDOS and Arrow Therapeutics.

<sup>5</sup> Preliminary figures. Final data will be available end March 2009 on [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

# 16 RESOURCES, SKILLS AND CAPABILITIES

AstraZeneca's continued success depends on focused delivery of our strategy, responding effectively to the challenges of our rapidly changing business environment and successfully identifying and harnessing opportunities to strengthen the value of our contribution to healthcare and society.

This section describes the resources, skills and capabilities that we have in place to drive delivery of our strategic goals and keep AstraZeneca at the forefront of positive change within the industry.

Underpinning all of our activity is our commitment to innovative collaboration, focused on a common goal: better health. This means engaging and working with our stakeholders to gain the insights we need to maintain a flow of new, targeted and valued medicines. It means working in effective teams internally and in external partnerships that complement and strengthen our own capabilities. It also means active participation in the debate on issues that impact our business and shape our operating environment.

## MEDICINES

Backed by our 70-year track record of pharmaceutical innovation, we have a broad range of marketed medicines that continue to make a positive difference in important areas of healthcare. We actively and rigorously develop our brands to bring further benefit for patients and maximise their commercial potential.

Our range of medicines is highly competitive and includes 11 products each with annual sales of over \$1 billion. Our business growth in the short to medium term is being driven by *Arimidex*, *Crestor*, *Seroquel* and *Symbicort*. Together with *Nexium*, these five key products provide the platform for our continued success whilst we enhance our pipeline for the future.

Our medicines are testament to the skills of our scientists and our commitment to working closely with physicians, patients and other stakeholders to understand what they need and what they value. Such relationships have helped us develop families of medicines – generation by generation – such as the hormone-based cancer treatments we have discovered since the 1970s, including *Nolvadex* (tamoxifen), *Zoladex*, *Casodex*, *Arimidex* and *Faslodex*. Among other benefits, these have played a part in increasing the five year survival rate for women with breast cancer from under 70% 50 years ago to around 90% today.

We introduced the world's first proton pump inhibitor, *Losec/Prilosec* in 1988 – a breakthrough in the treatment of gastro-oesophageal reflux disease – and we have since developed an improved therapy, *Nexium*, which provides healing and symptom relief in more patients in a shorter time.

Even after a new medicine is launched, we continue to explore all the ways it can be used to maximise patient benefit. We have clearly defined development management programmes for our marketed products designed to optimise both the benefit they bring to patients' lives and their commercial potential within the timeframe that patent protection is available to us.

For example, *Crestor*, our statin for lowering cholesterol levels has been used to treat over 14 million people since its launch in 2003. Studies in recent years have shown that not only does *Crestor* reduce cholesterol, it also slows the progress of atherosclerosis, or "hardening of the arteries". In 2008, a major study reported that *Crestor* significantly reduced major cardiovascular events by 44% in patients with normal cholesterol levels but with other high risk factors.

Similarly, we first introduced *Seroquel* as a treatment for schizophrenia, and our subsequent studies have shown that it is also effective in treating both the manic and depressive dimensions of bipolar disorder. Recent clinical development has also been undertaken for the use of *Seroquel* in treating major depressive disorder and general anxiety disorder. Launched in 1997, *Seroquel* is now the most commonly prescribed atypical anti-psychotic in the US.

We also continue to develop better ways in which our medicines can be used. Our *Symbicort* Maintenance and Reliever Therapy (*Symbicort SMART*) is the first asthma treatment regime to combine both regular maintenance and as-needed reliever therapies – allowing patients to control daily symptoms and reduce asthma attacks using one inhaler, instead of the usual two or more. In another development, *Symbicort* is also now used to treat chronic obstructive pulmonary disease (COPD).

Our acquisition of *MedImmune* in 2007 brought some significant biological products into our portfolio. *Synagis* is the standard of care for respiratory syncytial virus (RSV) prevention and has been administered to over one million premature babies around the world to help protect them from serious RSV disease.

*FluMist*, the first intranasal influenza vaccine to be approved in the US, represents the first innovation in flu vaccination in more than 60 years.

Further information about all our major products can be found in the Therapy Area Review on page 53.

## ENSURING PATIENT SAFETY

The safety of the patients who take our medicines is a fundamental consideration. All drugs have potential side effects and we aim to minimise the risks and maximise the benefits of each of our medicines, throughout their discovery, development and beyond. After launch, we continually monitor the use of all our medicines to ensure that we become aware of any side effects not identified during the development process and to ensure that accurate, well-informed and up-to-date information concerning the safety profile of our drugs is provided to regulators, physicians, other healthcare professionals and, where appropriate, patients. Clinical trials, although extensive, cannot replicate the complete range of patient circumstances and rare side effects can often only be identified after a medicine has been launched and used in far greater numbers of patients and over longer periods of time. We have comprehensive and rigorous pharmacovigilance systems in place for detecting and rapidly evaluating such effects, including mechanisms for highlighting those that require immediate attention.

We have an experienced, in-house team of around 500 clinical patient safety professionals working around the world who are dedicated to the task of ensuring that we meet our commitment to patient safety. Each of our products (whether in development or on the market) has an assigned Global Safety Physician who, supported by a team of Patient Safety Scientists, is responsible for that product's continuous safety surveillance. Patient Safety Managers in each of our national companies have local responsibility for product safety within their respective countries.

Our Chief Medical Officer (CMO) has overall accountability for the benefit/risk profiles of the products we have in development and those on the market. The CMO provides medical oversight and ensures that appropriate risk assessment processes are in place to enable informed decisions to be made about safety as quickly as possible.

Our commitment to patient safety includes ensuring the security of our medicines throughout their manufacture and supply. We continuously monitor our business environment to identify any new or emerging product security risks and work to ensure that these are managed quickly and effectively. In addition to our internal processes, we also work with regulatory authorities, government agencies, trade associations and law enforcement agencies to combat the growing threat of counterfeiting. Further details of the ways in which we manage the risk of counterfeiting can be found in the Principal Risks and Uncertainties section from page 76.

#### HOW WE PRICE OUR MEDICINES

Despite significant advances in healthcare in recent decades, many diseases are still under-diagnosed or not well treated, or there is not yet an effective therapy. Continued innovation is required to address these unmet medical needs. At the same time, the growing demand for healthcare, driven by people living longer, increasing populations and the emergence of new economies, means ever greater pressure on the payers' budgets.

At AstraZeneca, our challenge is to balance the associated downward pressure on the price of medicines with the cost of the continued innovation that brings benefit for patients and society.

When setting the price of a medicine, we take into consideration its full value to patients, to those who pay for healthcare and to society in general. Our pricing also takes account of the fact that, as a publicly owned company, we have a duty to ensure that we continue to deliver an appropriate return on investment for our shareholders. We balance many different factors, including ensuring appropriate patient access, in our global pricing policy, which provides the framework for optimising the profitability of our products in a sustainable way.

We continually review our range of medicines (both those on the market and in the pipeline) to identify any that may be regarded as particularly critical to meeting healthcare needs – either because they treat diseases that are (or are becoming) prevalent in developing countries, or because they are potentially a leading or unique therapy addressing an unmet need and offering significant patient benefit in treating a serious or life-threatening condition. In such cases, we aim to provide patient access to these medicines through expanded patient access programmes. We also support the concept of differential

pricing in this context, provided that safeguards are in place to ensure that differentially priced products are not diverted from patients who need them, to be sold and used in more affluent markets.

#### BRINGING ECONOMIC AS WELL AS THERAPEUTIC BENEFIT

Our medicines play an important role in treating serious disease and in doing so they bring economic as well as therapeutic benefits. Effective treatments can help to save healthcare costs by reducing the need for more expensive care, such as hospital stays or surgery. They also contribute to increased productivity by reducing or preventing the incidence of diseases that keep people away from work.

#### RESEARCH AND DEVELOPMENT

##### R&D STRATEGY

Our R&D strategy is geared to maintaining a flow of new products that will deliver sustained business growth in the short, medium and long-term.

In the short-term, we have continued to build on the good growth achieved in 2007. Our overall portfolio volume has grown by 5% and our in-phase distribution of the projects has improved. Phase III volumes have remained constant and our Phase II portfolio has grown by over 50% (20 to 31) during 2008.

Notable successes in the life-cycle management (LCM) of our key marketed products during the year included eight significant submissions and three approvals in the US and/or the EU, which are described in the Therapy Area Review commencing on page 53.

In the medium-term, we will continue to drive our pre-clinical and clinical Phase I and II projects towards proof of concept as rapidly as possible. In line with our ongoing externalisation strategy, we continue to look beyond our own laboratories, and actively seek alliances and acquisitions with external partners to gain access to leading drug projects or technology platforms.

The progress we are making in our drive to increase productivity is reflected in the delivery of projects from discovery and the growth of our early development portfolio. We have introduced a more rigorous and consistent measure for the number of compounds reaching development and now record additions to the pipeline from the first pre-clinical study conducted for regulatory

approval purposes (First Good Laboratory Practice (FGLP)) instead of when a candidate drug is simply nominated for development. During 2008, 32 FGLPs were selected for development (compared with 36 in 2007).

Further details are set out in the Development Pipeline table on pages 22 to 24.

#### DISEASE AREA STRATEGIES

Our disease area strategies are established using a regular review process that centres on the evaluation of research opportunities against a set of consistent criteria, including unmet medical need, commercial and scientific opportunity, competitive position and alignment with our capabilities. Our R&D Executive Committee (further details of which are set out on page 21) uses the reviews to determine the levels of investment we will make in different disease areas. The process also enables us to deploy our resources in the best way to meet our commercial and scientific objectives.

Our New Opportunities Team, operating from pre-clinical through development, generates more value from disease mechanisms and compounds through both internal efforts and external alliances with the aim to transform them into profitable, innovative therapies. In addition, the New Opportunities Team will consider a broad range of pre-clinical to late stage development opportunities. This includes identification of compounds that help address side effects and complications in disease areas we have prioritised, and of opportunities that enable rapid entry into breaking new disease areas via strategic alliances, in order to provide additional assets for our pipeline and the delivery of profitable growth.

#### OUR RESOURCES

AstraZeneca's research effort spans a range of different disciplines and locations, but our scientific community shares a common goal: to deliver new and innovative medicines to patients as quickly, efficiently and safely as possible. They work together across national boundaries and sites to exchange ideas, promote best practice and maximise the scientific potential offered by our size and global reach.

We have a global R&D organisation, with around 12,000 people at 17 principal centres in eight countries. Our main small molecule facilities are in the UK (Alderley Park, Macclesfield and Charnwood); Sweden (Lund, Mölndal and Södertälje); and the US (Boston, Massachusetts and Wilmington, Delaware). Other sites which have a focus on discovery



"2008 has been a milestone year for our R&D organisation. We are discovering and developing effective medicines faster than ever before and the considerable progress we have made in reducing development cycle times and costs has been achieved without compromising on quality.

research are in Canada (Montreal, Quebec); France (Reims); India (Bangalore); China (Shanghai); and the UK (KuDOS and Arrow Therapeutics' sites). We have a clinical development facility in Osaka, Japan. Our principal sites for biologics and vaccines are in the US (Gaithersburg, Maryland and Mountain View, California) and the UK (Cambridge). Substantially all of our properties are held freehold, free of material encumbrances and we believe such properties are fit for their purposes.

In 2008, we invested \$5.2 billion in R&D (2007: \$5.2 billion; 2006: \$3.9 billion), \$101 million on externalisation and approved \$308 million of R&D capital investment to strengthen our resources in line with our strategic objectives. Major capital commitments made in previous years continue to progress as planned. In Boston (US), we have continued to enhance our infection research capability, and at Macclesfield (UK) ongoing work is focused on expanding and improving our Process R&D laboratories. New investments in 2008 included the replacement and consolidation of Pharmaceutical & Analytical R&D's high potents manufacturing facilities at Charnwood (UK), and a major construction project to provide a new biologics services facility at Alderley Park (UK).

As part of our strategic expansion in important emerging markets, we continue to strengthen our research capabilities in Asia. Investment continued during 2008 at our 'Innovation Centre China' research facility in Shanghai,

Our review of our disease area strategies and deployment of resources to the best opportunities led us to modify our therapeutic area strategy during the year and to stop discovery work in osteoarthritis to allow us to increase our commitment to biologics. Coupled with a productive licensing activity, we have now created a more balanced portfolio of high quality small molecule and biologics projects that present a strong platform for continued success in important areas of unmet medical need.

During 2008, we delivered eight significant regulatory packages in several jurisdictions to broaden the use of our marketed products, *Seroquel*, *Symbicort*, *Iressa* and *FluMist*;

as well as two new product submissions for motavizumab and *Onglyza*™. We have strengthened our mid-stage pipeline and maintained 10 projects in Phase III development. 32 projects entered the pipeline during the year and 44 projects were progressed to their next phase of development. We have a total of 144 projects in the pipeline – an increase of seven compared with 2007.

I believe that AstraZeneca is well placed to maintain this rate of progress, backed by our clear strategy for R&D, our drive for continuous improvement, and an R&D leadership committed to delivery of our scientific and commercial objectives."

**JOHN PATTERSON CBE FRCP**  
Executive Director, Development

which opened in 2007. The Centre is focused on translational medicine in cancer, a major cause of death in China. In addition, Process R&D has further expanded its capability in Bangalore as it moves to optimise the capital investment at this site in recent years.

#### DISCOVERY RESEARCH

In discovery research, we analyse many thousands of compounds for their potential to become a new medicine. Only a few make it through the various, increasingly demanding, stages of discovery research through which we identify the most promising candidates for clinical development. Our discovery teams work closely with clinical and development teams to prioritise their activities in line with our disease area strategies.

We continue to improve the quality of chemical leads and biological targets so that we can eliminate, at an early stage, those compounds that are unlikely to make it through development. We have invested in a number of key academic collaborations to identify potential new targets, disease mechanisms and technology platforms. For example, collaborations with Melior Discovery (Exton, Philadelphia, US) and Graffinity Pharmaceuticals (Heidelberg, Germany) help us to identify more rapidly those high quality, novel compounds which have the potential to proceed rapidly through discovery into clinical development. In addition we have continued to increase the speed and efficiency of our drug discovery processes using Lean Sigma™ approaches.

We believe that one of the reasons for our productivity success in Discovery over the past five years is because we have taken a long-term view and maintained consistency of focus over time on our strategic objectives. Latest industry benchmarks indicate that our speed and cost-effectiveness in Discovery have moved into the top quartile, while our delivery of candidate drugs this year exceeded our targets despite managing significant change across the organisation.

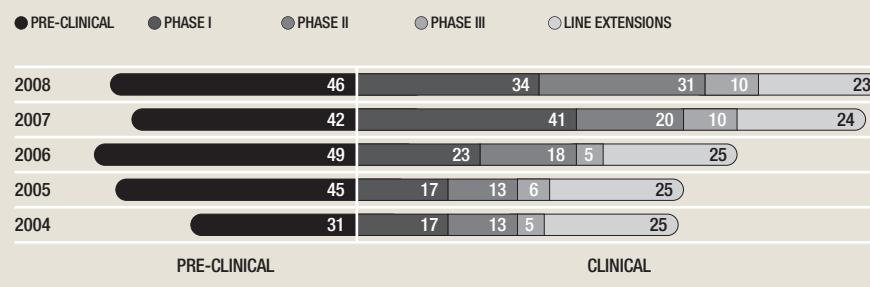
#### DISCOVERY MEDICINE

Discovery medicine (the collaboration between clinical medicine and basic science) helps us gain a better understanding of human diseases and the suitability of future medicines to treat those diseases, as well as identify and deploy biomarkers (a biological factor or measure that can be used to quantify the progress of a disease and/or the effects of a treatment) which can help us to make early decisions on the effectiveness and safety of our compounds in clinical development. All compounds nominated for development now have a biomarker strategy although it is not always easy to identify a marker for each molecule.

#### SAFETY ASSESSMENT

Safety assessment is a critical aspect of all our research and we implement high-throughput testing of safety early in the process of prioritising and selecting the best compounds for progression. Recent process improvements have reduced attrition due to safety issues and cut the time taken to deliver key safety studies, without compromising quality – allowing more rapid entry to testing in man.

## DEVELOPMENT PROJECTS – NCEs AND LINE EXTENSIONS



## DEVELOPMENT

In development, we focus on ensuring that our expanding range of potential medicines is developed effectively to meet the needs of patients and regulators. Project teams bring together all the relevant skills and experience needed for the rapid progress of new medicines, the management of development risks, and ensuring that quality and safety remain fundamental considerations at every stage.

We have a wide range of compounds in early development, and a total of 34 projects in Phase I, 31 projects in Phase II and 10 projects in Phase III development and are running 23 life-cycle management projects.

Throughout 2008, we have continued to focus on improving quality and speeding the progression of early phase projects along the development pipeline to market. Backed by reduced timelines across the whole small molecule development process, Phase I cycle times have halved since 2006 and over the last three years the composite product development cycle time has now been reduced by approximately two years.

With the adoption of Lean Sigma™ methodology and the implementation of best practice solutions, we have eliminated the lost time between key steps in the development process and we again exceeded our targets for development cycle times in 2008 for our small molecules. We believe that we are well placed to achieve our target of median composite development cycle times of eight years by 2010, based on the projects currently in development. Importantly, we have in recent years established a culture of continuous improvement that should sustain the momentum behind our initiatives for increased speed, with better quality, and with improved efficiency.

The initiatives we have in place to deliver significant productivity improvements by 2011 are making excellent progress and all are on track. These include:

- > The change programme that resulted from our disease area strategy review during 2007 was completed in 2008 with anticipated financial benefits of over \$100 million to be delivered by the end of 2009.
- > During 2008, we centralised and outsourced our clinical data handling to our external partner, Cognizant. This has enabled us to simplify our processes, promote consistency and drive resource efficiencies across our data management. These improvements are also helping to speed our internal data interpretation and decision-making.
- > Our re-organisation of the Pharmaceutical and Analytical R&D function aims to improve productivity and meet the demands of an increasingly strengthened pipeline better by changing working processes, while retaining our focus on innovation. For example, we have been able to progress a larger number of early projects by reducing the resource per project by more than 50% since 2004. The function has also downsized by 10% while introducing these productivity improvements.
- > Streamlining of our regulatory function exceeded the target 18% reduction in headcount achieving a 21% reduction by June 2008.

## BIOLOGICAL PRODUCTS

We have a significant biologics business with proven end-to-end capabilities from discovery to commercialisation brought together in 2007 under the brand name of MedImmune. As is the case for small molecules, the discovery and development strategy for our biologics business is determined by the R&D Executive Committee, as is the funding allocation from the overall R&D budget.

We have around 30 biological product candidates in our development pipeline, backed by leading-edge technologies and R&D capabilities that cover a broad range of approaches to targeting disease across a range of therapy areas. These include antibodies, antibody derivatives, therapeutic proteins, peptides, RNA interference technologies and various types of live attenuated and sub-unit vaccines.

We also have a world-leading drug discovery platform, based on advanced technology for rapidly isolating human monoclonal antibodies using phage and ribosome display and a significant in-house manufacturing capacity and capability, including expertise in high-yield purification process and analytical development resources.

Our strategic objective is to generate eight compounds entering pre-clinical phase per year, on a steady-state basis, which we anticipate will translate into six new investigational drugs per year.

## EXTERNALISATION

Our externalisation strategy continues to focus on enhancing our internal innovation through investment, external partnerships, alliances and acquisitions that further strengthen our pipeline of new products and our Strategic Planning and Business Development (SPBD) team works closely with R&D, global marketing and finance teams to deliver these objectives.

We have completed over 40 major externalisation deals in the last two years, including the acquisitions of MedImmune and Arrow Therapeutics in 2007, as well as numerous smaller deals to enhance and strengthen the overall health of the portfolio.

We believe that every collaboration is unique, and we work with potential partners to structure deals that leverage each party's capabilities and assets. Major transactions in the last two years have included the in-license of rights to Cubicin™ (an antibiotic) from Cubist in certain geographies and a co-development and co-commercialisation agreement with Abbott for a combination of Crestor and Trilipix™. We recently extended our co-development and co-commercialisation agreement with Bristol-Myers Squibb Company regarding saxagliptin (Onglyza™) and dapagliflozin (two products in development for the treatment of Type 2 diabetes) to include dapagliflozin in Japan. We also concluded an exclusive worldwide agreement with MAP Pharmaceuticals to develop and commercialise Unit Dose Budesonide (UDB), MAP Pharmaceuticals' proprietary nebulised formulation of budesonide.

Important early stage collaborations have included deals with Argenta and Silence Therapeutics and more recently with Columbia University in the US regarding both cardiovascular and neurology opportunities. Additionally, we have also formed a significant number of early stage partnerships to ensure that we have access to the latest science and technology.

Our externalisation strategy is not restricted to securing in-licensing deals and research or commercial collaborations. It represents an important component of our efforts to maximise value from our portfolio and incorporates value creation through disposal. To that end, we have completed a number of out-licensing transactions and disposals in 2008, including the transfer out of assets relating to certain gastrointestinal projects to create a new entity, Albireo. We also concluded a fostering agreement with Cancer Research UK under which they will conduct the early development of an Src Kinase Inhibitor at their own cost with AstraZeneca retaining options on the product upon completion of certain development milestones.

We continue to strengthen our biologics capability through externalisation and completed a number of significant transactions during 2008 including deals with Direvo Biotech and SBI Biotech Co.

During 2008 we broadened the scope of activity by MedImmune Ventures, a captive venture capital fund, set up to access leading-edge technology emerging within the biotechnology world. MedImmune Ventures will now seek opportunities on a more global basis to stay at the forefront of novel science accessing the most innovative start-ups in biotechnology.

#### R&D ETHICS

In our search for new medicines for important areas of healthcare, we are committed to innovative, high quality science, conducted to high ethical standards. Compliance with relevant laws and regulations is a minimum baseline and underpins our own global principles and standards, as outlined in our Bioethics Policy.

#### Clinical trials

Most of our clinical trials are global in nature because studies conducted across a broad geographic span enable us to represent more fully the diversity of the patient populations for whom the new medicine is intended.

When conducting a trial anywhere in the world, we operate to the highest of the standards required by the external international, regional or local regulations, and our own internal standards. We have strict guidelines to ensure that those taking part are not exposed to unnecessary risks; that they understand the nature and the purpose of the research; that proper procedures for gaining informed consent are followed (including managing any special circumstances such as different levels of literacy); and that appropriate confidentiality rules are applied.

Whilst all AstraZeneca clinical studies are designed and finally interpreted in-house, some of them are run for us by external organisations. The percentage of studies we place with third parties varies, depending on the number of trials we have underway and the amount of internal resource available to do the work. We contractually require all of our suppliers to work to the same standards that we apply in-house. In 2008, around 26% of patients in our global studies were monitored by external contract research organisations on our behalf.

During 2008, we extended the scope of our clinical trials disclosure to include information about the registration and results of all AstraZeneca sponsored clinical trials for all products in all phases, including marketed medicines, drugs in development and drugs whose further development has been discontinued. We make information available, irrespective of whether the results are favourable or unfavourable to AstraZeneca, on public websites including our own dedicated website, [astrazenecaclinicaltrials.com](http://astrazenecaclinicaltrials.com). At the end of 2008, we had registered over 800 trials and published the results of more than 500 trials.

#### Animal research

Our pre-clinical research includes animal studies, which continue to play a vital role. They provide essential information, not available through other methods, about the effects of a potential new therapy on disease and the living body. Regulatory authorities around the world also require safety data from pre-clinical testing in animals before a new medicine can be tested in man.

All our research using animals is carefully considered and justified and, backed by our global policies, we continue to drive the application of the 3Rs (Replacement, Reduction and Refinement of animal studies) across our research activity.

The number of animals we use each year varies according to the amount of pre-clinical research we are doing and the complexity of the diseases under investigation. As we continue to expand our discovery research activity, our ongoing challenge is to ensure that our use of animals is minimised without compromising the quality of the data. We believe that, without our active commitment to the 3Rs, our animal use would be much greater.

We continue to develop our data capture processes to incorporate companies recently acquired by AstraZeneca and our animal numbers for 2008 now include MedImmune, Arrow Therapeutics and KuDOS.

In 2008, AstraZeneca used approximately 347,000<sup>1</sup> animals in-house (2007: 271,000). In addition, approximately 29,000<sup>1</sup> animals were used by external contract research organisations on our behalf (2007: 13,500). Around 93% of the animals used in 2008 were rodents, 4% were fish and amphibians and the remaining 3% included chickens, rabbits, dogs, ferrets, primates, pigs and sheep. We also use genetically modified mice and rats to understand better the genes involved in human disease. In 2008, these accounted for approximately 13% of our total rodent use.

We only use primates in circumstances where no other species or non-animal methods can provide the safety or clinical benefit information that we are seeking in a study, and where the outcomes of the study are likely to bring significant advances for the development of new medicines. Our expanding biologics capability means that we will be increasing our primate use over time, particularly in the development of monoclonal antibodies targeted at important areas such as cancer and respiratory disease. Monoclonal antibodies are highly specific to human physiology, so primates are in most cases the only relevant animal model because of their similarity to humans.

AstraZeneca does not conduct or outsource work using wild caught primates or great ape species. In the future, in the rare case where there is no credible alternative model, exceptions may be considered but this will require rigorous secondary ethical and scientific review – in addition to our normal review processes – to challenge the need for the study, followed by appropriate Board level approval.

<sup>1</sup> Preliminary figures. Final data will be available end March 2009 on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility)

The welfare of the animals we use continues to be a top priority. Qualified veterinary staff are involved in the development and implementation of our animal welfare programmes and everyone working with laboratory animals is trained and competent in their allocated responsibilities.

As well as mandatory inspections by government authorities, we have a formal programme of internal inspections carried out by our own qualified staff. External contract research organisations that conduct animal studies on AstraZeneca's behalf are also required to comply with our ethical standards, and we conduct regular inspections to ensure our requirements are being met.

#### **Stem cell research**

As a company whose success is built on leading-edge science, we continuously monitor and assess new research capabilities to identify opportunities that could help us deliver better medicines for patients worldwide. We believe that human embryonic stem cell research may present such an opportunity.

Because this is a relatively new area for us and because we do not yet have all the necessary skills and technologies in-house, we are working with external partners who have the capabilities and expertise, and an ethical commitment consistent with our own. Some significant progress has been made, with some promising results, but more work is needed to understand the full potential of this type of research.

Our Bioethics Policy demands compliance both with external legislation, regulations and guidelines, and with our own codes of research practice, which include essential criteria that must be met before any such research is undertaken. Similar to those that govern inclusion in public stem cell registries such as the UK Registry and the US National Institute of Health Registry, these criteria require that the stem cells must have been derived from a fertilised egg that was created for reproductive purposes, that the fertilised egg must no longer be needed for these purposes and that fully informed consent (with no financial inducements) must have been obtained for the donation of the fertilised egg for scientific research. These requirements apply to all internal work and external research carried out on our behalf.

AstraZeneca is one of nine partners in a European Framework Research VI programme and is a founding member of the public-private partnership, Stem Cells for Safer Medicines, in the UK, which brings together academia, government and members of the pharmaceutical industry to broaden the approach to understanding this complex area of research.

Further information about our commitment to responsible research is available on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

#### **R&D EXECUTIVE COMMITTEE, GOVERNANCE AND PORTFOLIO MANAGEMENT**

The R&D Executive Committee oversees and prioritises our portfolio of both small molecule and biological discovery and development projects from across the Group (whether originating from our own R&D activities or from external sources). On an annual basis it takes a view across all therapy areas and makes decisions based on unmet therapeutic need, commercial and scientific opportunity, competitive position and capability mix. It is also charged with overseeing a portfolio review process intended to ensure that internal and external opportunities are reviewed using the same criteria and that there is a clear externalisation strategy aligned with the disease area strategies.

The Committee has the following accountabilities:

- > To establish a series of disease area strategies through joint therapy area strategy teams and to bring them together into a single AstraZeneca portfolio across small molecules and biologics.
- > To develop enabling strategies to ensure the optimal delivery of the disease area strategic targets, including technology strategies, capital expenditure, capability mix, shape and size and geographic footprint of the R&D organisation.
- > To work with the Chief Executive Officer and Chief Financial Officer to agree an overall R&D budget for AstraZeneca and, within the R&D Executive Committee, allocate that budget to discovery and development activities across small molecules and biologics.

- > To conduct a portfolio review process to evaluate all potential new medicines within the business to ensure resource prioritisation and delivery in line with that process. In particular, this process is intended to ensure that internal and external opportunities are reviewed using the same criteria and that there is a clear externalisation strategy, aligned with and complementary to, the disease area strategies, the internal portfolio and local market needs.

The R&D Executive Committee currently comprises the Executive Vice-President, Discovery Research; the Executive Vice-President, Development; the Executive Vice-President, Research and Development, MedImmune; the Executive Vice-President, Clinical Research and Chief Medical Officer, MedImmune; the Chief Executive Officer, North America and Executive Vice-President, Global Marketing and the President of MedImmune; the Senior Vice-President, Strategic Planning and Business Development; the Vice-President, R&D Finance; and the Vice-President, Development Projects.

## 22 DEVELOPMENT PIPELINE AT 29 JANUARY 2009

Therapy area	Compound	Mechanism	Areas under investigation	Estimated filing date	
				MAA	NDA
<b>PHASE I NCEs</b>					
Cardiovascular	AZD6482	PI3K-beta inhibitor	thrombosis		
	AZD4017	11BHSD inhibitor	diabetes/obesity		
Gastrointestinal	AZD2066	metabotropic glutamate receptor 5 antagonist	GERD		
	AZD1386	vanilloid receptor antagonist	GERD		
Infection	MEDI-534	RSV/PIV-3 vaccine	intranasal immunisation		
	MEDI-560	PIV-3 vaccine	intranasal immunisation		
	MEDI-566	pandemic influenza virus vaccine	pandemic influenza vaccine		
	AZD9639 (MEDI-564) <sup>1</sup>	RSV F protein inhibitor	RSV treatment		
	CMV Vaccine	CMV vaccine	cytomegalovirus		
	MEDI-557	YTE – extended half-life RSV MAb	RSV prophylaxis		
	MEDI-559	RSV vaccine	RSV treatment		
Neuroscience	AZD5904	myeloperoxidase (MPO) inhibitor	multiple sclerosis		
	AZD3241	myeloperoxidase (MPO) inhibitor	Parkinson's disease		
	AZD2066	metabotropic glutamate receptor 5 antagonist	chronic neuropathic pain		
	AZD6280	GABA receptor subtype partial agonist	anxiety		
	TC-5619 <sup>1</sup>	neuronal nicotinic receptor agonist	cognitive disorders in schizophrenia		
	AZD8529	glutamatergic modulator	schizophrenia		
	AZD2516	metabotropic glutamate receptor 5 antagonist	chronic neuropathic pain		
	AZD1446	neuronal nicotinic receptor agonist	Alzheimer's disease		
	AZD7268	enkephalinergic receptor modulator	depression/anxiety		
Oncology	AZD8931	erbB kinase inhibitor	solid tumours		
	AZD7762	CHK1 kinase inhibitor	solid tumours		
	AZD8330 (ARRY-424704) <sup>1</sup>	MEK inhibitor	solid tumours		
	CAT-8015	recombinant immunotoxin	haematological malignancies		
	MEDI-538 <sup>1</sup>	CD19 B cells	leukaemia/lymphoma		
	AZD8055	TOR kinase inhibitor	range of tumours		
	AZD6918	TRK inhibitor	solid tumours		
	AZD4769	EGFR tyrosine kinase inhibitor	solid tumours		
Respiratory & Inflammation	Pneumococcal vaccine <sup>1</sup>	pneumococcal vaccine	Streptococcus pneumoniae		
	CAM-3001	anti-GM-CSFR	rheumatoid arthritis		
	AZD8848		asthma		
	AZD8566	CCR5	rheumatoid arthritis		
	AZD8075	CRTh2 antagonist	asthma/COPD		
	AZD5985	CRTh2 antagonist	asthma/COPD		

<sup>1</sup> Partnered product.

Therapy area	Compound	Mechanism	Areas under investigation	Estimated filing date	
				MAA	NDA
<b>PHASE II NCEs</b>					
Cardiovascular	AZD0837	direct thrombin inhibitor	thrombosis		2012
	AZD1305	anti-arrhythmic	arrhythmias		2012
	AZD6370	GK activator	diabetes		2012
	AZD1656	GK activator	diabetes/obesity		2012
Gastrointestinal	AZD3355	inhibitor of transient lower oesophageal sphincter relaxations (TLESR)	GERD	2011	2011
Infection	CytoFab™ <sup>1</sup>	anti-TNF-alpha polyclonal antibody	severe sepsis		
	EBV vaccine <sup>1</sup>	Epstein-Barr virus vaccine	post-transplant proliferative disease		
	AZD7295	NS 5a inhibitor	hepatitis C		
Neuroscience	AZD3480 <sup>1</sup>	neuronal nicotinic receptor agonist	Alzheimer's disease		
	AZD6765	NMDA receptor antagonist	depression	2012	2012
	AZD1940	CB1 receptor agonist	nociceptive and neuropathic pain		
	AZD1386	vanilloid receptor antagonist	chronic nociceptive pain		
	AZD2624	NK receptor antagonist	schizophrenia		
	AZD2327	enkephalinergic receptor modulator	anxiety and depression		
	AZD7325	GABA receptor subtype partial agonist	anxiety	2013	2012
Oncology	Recentin	VEGFR tyrosine kinase inhibitor	NSCLC	2013	2013
	AZD6244 <sup>1</sup> (ARRY-142886)	MEK inhibitor	solid tumours	2014	2014
	AZD2281	PARP inhibitor	breast/ovarian cancer	2012	2012
	AZD0530	SRC kinase inhibitor	solid tumours and haematological malignancies		
	AZD4877	cell cycle agent	haematological malignancies		
	AZD1152	aurora kinase inhibitor	haematological malignancies	2011	2011
Respiratory & Inflammation	AZD9056	ion channel blocker (P2X7)	rheumatoid arthritis	2012	2012
	AZD5672	chemokine receptor antagonist (CCR5)	rheumatoid arthritis	2012	2012
	AZD1981	CRTh2 receptor antagonist	asthma/COPD		
	MEDI-528	anti-IL-9 antibody	asthma		
	CAT-354	anti-IL-13 antibody	asthma		
	AZD9668	neutrophil elastase inhibitor	COPD		
	AZD1236	matrix metallo-proteinase inhibitor	COPD		
	AZD3199	iLABA	asthma/COPD		
	MEDI-563	anti-IL-5R antibody	asthma		
	MEDI-545	anti-IFN-alpha antibody	SLE, myositis		

**PHASE II LINE EXTENSIONS**

Gastrointestinal	Nexium	proton pump inhibitor	extra-oesophageal reflux disease	3Q 2009 <sup>2</sup>	3Q 2009 <sup>2</sup>
Infection	Motavizumab	humanised MAb binding to RSV F protein	early and late treatment of RSV in paediatric >1 yr		

**PHASE III/REGISTRATIONS: NCEs**

Cardiovascular	Onglyza <sup>™1</sup>	DPP-4 inhibitor	diabetes	Filed	Filed
	Brilinta (AZD6140)	ADP receptor antagonist	arterial thrombosis	4Q 2009	4Q 2009
	Crestor/Trilipix <sup>™1</sup>	statin + fibrate fixed combination	dyslipidaemia		3Q 2009
	Dapagliflozin <sup>1</sup>	SGLT2 inhibitor	diabetes	2H 2010	2H 2010
Infection	Motavizumab	humanised MAb binding to RSV F protein	RSV prevention	TBD	Filed
Neuroscience	PN400 <sup>1</sup>	naproxen + esomeprazole	signs and symptoms of OA, RA and AS	4Q 2009	Mid 2009
Oncology	Zactima	VEGFR/EGFR tyrosine kinase inhibitor with RET kinase activity	NSCLC	2Q 2009	2Q 2009
	Recentin	VEGFR tyrosine kinase inhibitor	CRC	2H 2010	2H 2010
	Recentin	VEGFR tyrosine kinase inhibitor	recurrent glioblastoma	2H 2010	2H 2010
	ZD4054	endothelin A receptor antagonist	hormone resistant prostate cancer	2011	2011

<sup>1</sup> Partnered product.<sup>2</sup> Publication only.

Therapy area	Compound	Mechanism	Areas under investigation	Estimated filing date	
				MAA	NDA
<b>PHASE III LINE EXTENSIONS</b>					
Cardiovascular	Atacand	angiotensin II antagonist	diabetic retinopathy	Published <sup>1</sup>	Published <sup>1</sup>
	Atacand Plus	angiotensin II antagonist/thiazide diuretic	32/12.5mg, 32/25mg for hypertension	Filed	
	Crestor	statin	outcomes in subjects with elevated CRP	2Q 2009	2Q 2009
	Onglyza™/Metformin FDC <sup>2</sup>	DPP-4 inhibitor + biguanide FDC	diabetes	2H 2010	4Q 2009
	Dapagliflozin/Metformin FDC <sup>2</sup>	SGLT2 inhibitor + biguanide FDC	diabetes	2011	2011
Gastrointestinal	Nexium	proton pump inhibitor	peptic ulcer bleeding	Filed	Filed
	Nexium Low Dose Aspirin™ Combination	proton pump inhibitor	low dose Aspirin™ associated peptic ulcer	3Q 2009	2Q 2009
	Nexium	proton pump inhibitor	extra-oesophageal reflux disease	3Q 2009 <sup>1</sup>	3Q 2009 <sup>1</sup>
Infection	FluMist	live, attenuated, intranasal influenza virus vaccine	influenza	Filed	Launched
Neuroscience	Seroquel	D <sub>2</sub> /5HT <sub>2</sub> antagonist	bipolar maintenance	Filed	Launched
	Seroquel	D <sub>2</sub> /5HT <sub>2</sub> antagonist	bipolar depression	Approved	Launched
	Seroquel XR	D <sub>2</sub> /5HT <sub>2</sub> antagonist	major depressive disorder	Filed	Filed
	Seroquel XR	D <sub>2</sub> /5HT <sub>2</sub> antagonist	bipolar mania	Approved	Approved
	Seroquel XR	D <sub>2</sub> /5HT <sub>2</sub> antagonist	bipolar depression	Approved	Approved
	Seroquel XR	D <sub>2</sub> /5HT <sub>2</sub> antagonist	generalised anxiety disorder	Filed	Filed
Oncology	Iressa	EGFR tyrosine kinase inhibitor	NSCLC	Filed	
	Zactima	VEGFR/EGFR tyrosine kinase inhibitor with RET kinase activity	medullary thyroid cancer	2H 2010	4Q 2009
	Faslodex	oestrogen receptor antagonist	first line advanced breast cancer		
Respiratory & Inflammation	Faslodex	oestrogen receptor antagonist	adjuvant		
	Symbicort pMDI	inhaled steroid/fast onset, long-acting $\beta_2$ agonist	asthma	Filed	Launched <sup>3</sup>
	Symbicort pMDI	inhaled steroid/fast onset, long-acting $\beta_2$ agonist	COPD	Filed	Filed
	Unit Dose Budesonide <sup>2,4</sup>	inhaled steroid	asthma		

Therapy area	Compound	Areas under investigation
<b>DISCONTINUED NCEs</b>		
Cardiovascular	AZD1175	diabetes/obesity
	AZD2207	diabetes/obesity
Infection	AZD2836	hepatitis C
Neuroscience	AZD3480	cognitive disorders in schizophrenia
	AZD0328	Alzheimer's disease
	AZD1704	analgesia
Oncology	MEDI-561 (IPI-504)	GIST
	MEDI-561 (IPI-504)	solid tumours
	IPI-493	solid tumours
	AZD4877	solid tumours
	AZD1152	solid tumours
Respiratory & Inflammation	AZD4818	COPD

Therapy area	Compound	Areas under investigation
<b>DISCONTINUED LINE EXTENSIONS</b>		
Cardiovascular	Crestor outcomes end stage renal disease <sup>5</sup>	renal disease

<sup>1</sup> Publication only.<sup>2</sup> Partnered product.<sup>3</sup> US approval based on 12 years and above.<sup>4</sup> Subject to review under the Hart-Scott-Rodino Act.<sup>5</sup> Will proceed to publication.

## COMMENTS

As disclosure of compound information is balanced by the business need to maintain confidentiality, information in relation to some compounds listed here has not been disclosed at this time.

Compounds in development are displayed by phase.

## SALES AND MARKETING<sup>1</sup>

Active in over 100 countries, we have an extensive sales and marketing network focused on growing our business and driving the levels of commercial excellence that will maintain our position among the industry world leaders.

Our Global Marketing (GM) function is responsible for developing and leading our global brand strategy, to ensure strong customer focus and commercial direction in the management of our R&D and brand development activity, across the full range of pipeline and marketed products.

We define at an early stage of the drug discovery process what we believe the profile of a medicine needs to be to work most effectively in combating a particular disease. These disease target product profiles (TPPs) are based on the insights that GM gains through its relationships with healthcare professionals, patients and others for whom the medicine must add value, including regulators and payers. The attitudes and needs of these groups are key drivers of the development of the TPPs which are used throughout the life-cycle of a medicine to guide our R&D activity and help shape the therapy area and marketing strategies. Early in the development of new products, we also consider how best to demonstrate the value of our medicines to payers.

### IN THE MARKETPLACE

As well as building on our leading positions in Established Markets such as the US, Japan and Europe, we continue to increase our strength through strategic investment in Emerging Markets, where ongoing GDP growth and changing disease demographics present significant opportunities for our business.

In these markets, we are applying the same strategic approach that has delivered our continued success in Established Markets – a focus on adapting to local customer needs, backed by global capability and scale. As part of this, we are strengthening our in-country sales and marketing presence to support swift and effective response to local customer needs. We continue to deliver strong, profitable growth in our Emerging Markets business, alongside our ongoing investment in these countries.

### SALES FORCE EFFECTIVENESS

In the majority of key markets, we sell through wholly-owned local marketing companies. Elsewhere, we sell through distributors or local representative offices. Our products are marketed primarily to physicians (both primary care and specialist) as well as to other healthcare professionals. Marketing efforts are also directed towards explaining the economic as well as the therapeutic benefits of our products to governments and others who pay for healthcare.

Face-to-face contact is still the single most effective marketing method, but increasingly the efforts of our sales forces are being complemented by our use of the internet to facilitate and enhance our commercial activities. For a few products we also use direct-to-consumer advertising campaigns in the US, where it is an approved and accepted practice.

The way in which biologics are marketed and sold is an intensive, personal approach that is more targeted compared with traditional pharmaceuticals, with extensive use of specialty pharmaceutical distributors and little direct-to-consumer advertising.

We continue to evolve our sales and marketing model to ensure we stay at the forefront of best practice in meeting customer needs. In 2008, we created a cross-commercial strategy team, charged with the development and sharing of new sales and marketing best practice across our marketing companies. Pilot programmes currently being implemented include interactive selling models that are better suited to the time pressures of our customers, and novel approaches to the use of web-based tools that provide customers with information and support for their patients.

In Europe, we have continued to invest significantly in strengthening the skills of our commercial teams. Throughout 2008, several major international training programmes were held to enhance customer interaction skills and build capabilities in collecting and analysing first-hand customer insight. These programmes are being reinforced by in-market follow-up activities to consolidate core segmentation and management skills, and promote high quality customer service.

Our rapid growth in Emerging Markets is driving demand for central commercial support, particularly in respect of sales force effectiveness. Core sales and marketing

training programmes have been adapted for, and deployed in, local environments. The main focus of these programmes is to embed core commercial skills, such as segmentation and targeting, and to strengthen sales managers' coaching and planning skills. Both regional and local senior teams have adopted the same practice of active follow-up and monitoring as applied in our Established Markets.

### ADAPTING TO THE CHANGING ENVIRONMENT

We continue to adapt to the changing demands and market conditions. Restructuring of our Established Market sales forces is being made to deliver efficiencies within a challenging business environment alongside the expansion of our Emerging Market teams to ensure we are appropriately resourced to deliver the full potential of the business opportunities in these countries.

Our business in Europe is now delivering improved productivity following our restructuring programme which over the last two years significantly reduced sales force numbers and marketing spend across all our major marketing companies in the region. Productivity benefits are also being seen in Japan, where we continue to reshape our sales and marketing cost base to support existing well performing brands and prepare for potential launches of new products.

In key Emerging Markets, in line with our future growth ambitions, we increased our sales and marketing spending by double-digit growth rates in 2008 and we continue to expand our sales forces to support our strategic expansion in these areas.

### SALES AND MARKETING ETHICS

Our global reach, coupled with the broad range of different channels that we use for interacting with our customers, means that we face an increasing level of complexity in the various regulatory and legislative environments in which we operate.

We are committed to ensuring that we manage these complexities consistently and appropriately and deliver ethical sales and marketing practices worldwide that, as a minimum, meet or exceed the standards set by external regulations and codes of practice. To that end, we require all our marketing companies to have codes of practice in place that are in line with our own Code of Conduct and Global Policies, and which are at least as restrictive as all applicable external codes.

<sup>1</sup> For the AstraZeneca definition of markets please see the Glossary on page 199.

During 2008, we updated and further strengthened our existing codes of sales and marketing practice, with a particular focus on interactions with patient groups, the use of the internet for communicating about our products, and anti-bribery and anti-corruption governance. This update was supported by extensive training of all relevant staff in all countries.

Line managers monitor compliance locally within their teams, supported by dedicated compliance professionals, who also work to ensure that appropriate training in sales and marketing practices is provided. We also have a nominated signatory network that focuses specifically on approving promotional materials, to ensure that they meet all applicable internal and external code requirements.

At a global level, our Group Internal Audit teams conduct local audits within our marketing companies and regional offices. Marketing companies outside North America conduct their own local audits under the control of the Local Compliance Officer, reporting to the Regional Compliance Officer.

Information concerning instances where our practices may not be up to the standards we require is collected through our various compliance and continuous assurance reporting routes and reviewed by senior management in local and/or regional compliance committees. As appropriate, serious breaches are reviewed by the AstraZeneca Board and the AstraZeneca Audit Committee. More information about our compliance and assurance processes is contained in the Risk Management and Assurance Processes section on page 74.

The variations between national external frameworks for regulation of sales and marketing practices create a challenge in interpreting the number of cases of confirmed breaches of codes or regulations ruled by external bodies (our key performance indicator (KPI)). Nevertheless, this KPI provides a benchmark against which to measure our performance over time.

In 2008, we identified a total of 15 such cases (32 in 2007), based on information gathered from 63 countries in which we have marketing subsidiaries or branch offices. We believe this significant decrease reflects our continuing commitment in this area and arises primarily from our strengthened internal procedures. The decrease should also be seen in the context of the continuing rise in strict standards from national and international codes.

We take all breaches very seriously and take appropriate action to prevent repeat occurrences. This may include re-training, discipline, or other corrective action up to and including dismissal, depending on the circumstances.

Further information about our commitment to responsible business practice is available on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

### INTELLECTUAL PROPERTY

Patents are important incentives for the continued innovation that drives society's progress. We continue to commit significant resources to establishing effective patent protection for our intellectual property, and to vigorously defending our patents if they are challenged.

The discovery and development of a new medicine requires a significant investment of time, resource and money by research-based pharmaceutical companies over a period of 10 or more years. For this to be a viable investment, the results – new medicines – must be safeguarded from copying with a reasonable amount of certainty for a reasonable period of time. The principal safeguard in our industry is a well-functioning patent system that recognises our effort and rewards our innovation with appropriate protection allowing time to generate the revenue we need to re-invest in new pharmaceutical innovation.

Our first level of protection is typically the patent to the new molecular entity, either a new chemical entity or a biological product. However, further innovations such as new medical uses or different ways of taking the treatment are often made during the R&D process and beyond. Each of these developments also requires significant resource investment to obtain marketing approval from regulatory authorities around the world. Our policy is to protect all the innovations that result from the investment we make in leading-edge science to deliver new and improved medicines.

We apply for patent protection relatively early in the R&D process to safeguard our increasing investment. We pursue these patents as appropriate through patent offices around the world, responding to questions and challenges from patent office examiners. In some countries, our competitors can challenge our patents in the patent offices, and in all countries competitors can challenge

our patents in the courts. We can face challenges early in the patent process and throughout the life of the patent, until the patent expires some 20 to 25 years later (patent expiry is typically ten to 15 years after the first marketing approval is granted). These challenges can be to the validity of a patent and/or to the effective scope of a patent and are based on ever-evolving legal precedents. There can be no guarantee of success for either party in patent proceedings taking place in patent offices or the courts.

Worldwide experience of biotechnology patent procurement and enforcement is, like the technology itself, relatively young and still developing. As a result, there can be some uncertainty about the validity and effective scope of biotechnology patent claims in the biotechnology arena. The investment in bringing biotechnology innovations to the market is huge and a well-functioning, predictable patent system is vital.

The generic industry is increasingly challenging innovators' patents, and almost all leading pharmaceutical products in the US have faced or are facing patent challenges from generic manufacturers. The research-based industry is also experiencing increased challenges elsewhere in the world, for example in Europe, Canada, Asia and Latin America. We are confident of the value of our innovations and, through close collaboration between our intellectual property experts and R&D scientists, we will continue to seek to obtain patents and defend them vigorously, if challenged. Further information about the risk of the early loss and expiry of patents is contained in the Risk section from page 74.

Compulsory licensing (the over-ruling of patent rights to allow patented medicines to be manufactured by other parties) is increasingly being included in the access to medicines debate. AstraZeneca recognises the right of developing countries to use the flexibilities in the World Trade Organization's TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement (including the Doha amendment) in certain limited circumstances, such as a public health emergency. We believe that this should apply only when all other ways of meeting the emergency needs have been considered and where healthcare frameworks and safeguards to prevent diversion are in place to ensure that the medicines reach those who need them.

## SUPPLY AND MANUFACTURING

Core to our continued business success is our ability to provide a secure, high quality, cost-effective supply of our products worldwide.

We continue to drive operational excellence, make adjustments to our manufacturing base and make effective use of strategic outsourcing to maximise the efficiency of our supply chain whilst maintaining the highest standards of quality and security of supply at every stage.

Our supply chains are structured to be flexible and responsive to the changing needs in our local markets. During 2008 we maintained our focus on driving continuous improvement to our supply system, as part of a wide-ranging cost and efficiency programme. This has delivered significant benefits in recent years, including reduced manufacturing lead times and lower stock levels, which have been achieved without compromising high levels of customer service and quality. Further improvements are planned using principles that focus on what adds value for our customers and patients, whilst also eliminating waste. In line with our commitment to strategic outsourcing to maximise supply chain efficiency, we plan to outsource all of our active pharmaceutical ingredient (API) manufacturing within five to 10 years.

We continuously review our manufacturing assets to make sure that they are being used in the most effective way, whilst preserving the flexibility we need to respond to fluctuations in demand. During 2008, we completed the sale of facilities in Germany and we closed our packaging site in Canada. Capital expenditure on supply and manufacturing facilities totalled approximately \$179 million in 2008 (2007: \$191 million; 2006: \$201 million) across a range of projects. We also recently announced the establishment of regional offices to optimise further our supply chain activity. This includes sourcing centres in Shanghai, China and Bangalore, India, established to identify high quality suppliers in those regions to support the growing market demand there. We will also establish a regional packing strategy, to improve our ability to respond to customer requirements, while equipping the business for Emerging Markets growth.

The introduction of new manufacturing processes has brought further opportunities to drive efficiencies across the global supply chain.

Our drive for efficiency and effectiveness resulted in announcements in 2008 of planned workforce reductions in our Supply organisation, which includes the closure of three sites, Porriño in Spain, Destelbergen in Belgium and Umeå in Sweden. Our facilities in Macclesfield (UK) and Södertälje (Sweden) will also be affected. Subject to local consultation, we expect these moves to result in headcount reductions of approximately 1,400 across the business by 2013. We recognise the impact that significant business change can have on our employees' morale and productivity and the increased risk of industrial action. We aim to manage these risks by ensuring that throughout the implementation of these changes we continue to consult fully with staff representatives and act in line with local labour laws. Our Human Resources policies and processes are also focused on ensuring that the people affected are treated with respect, sensitivity, fairness and integrity at all times, and you can read more about this commitment in the People section from page 28 onwards.

## SUPPLY CAPABILITY

We have approximately 10,800 people at 26 manufacturing sites in 18 countries working on the supply of our products.

Our principal small molecule manufacturing facilities are in the UK (Avlon and Macclesfield); Sweden (Snäckviken and Gårtuna, Södertälje); the US (Newark, Delaware and Westborough, Massachusetts); Australia (North Ryde, New South Wales); France (Dunkirk and Reims); Italy (Caponago); Japan (Maihara); China (Wuxi) and Puerto Rico (Canovanas). Approximately 1,400 people work in active pharmaceutical ingredient supply and 8,800 in formulation and packaging. We operate a small number of sites for the manufacture of active ingredients in the UK, Sweden and France, complemented by efficient use of outsourcing. Our principal tablet and capsule formulation sites are in the UK, Sweden, Puerto Rico, France and the US, and we also have major formulation sites for the global supply of parenteral and/or inhalation products in Sweden, France and the UK.

Packaging is undertaken in a large number of locations, both at our own sites and at contractors' facilities, which are situated close to our marketing companies to ensure rapid and responsive product supply.

Some 600 people are employed at our five principal biologics commercial manufacturing and distribution facilities in the US (Frederick, Maryland; Philadelphia, Pennsylvania and Louisville, Kentucky); the UK (Speke); and The Netherlands (Nijmegen) with capabilities in process development, manufacturing and distribution of biologics, including worldwide supply of monoclonal antibodies and influenza vaccines. In addition to our own capabilities, Boehringer Ingelheim in Biberach, Germany serves as our manufacturing partner for certain monoclonal antibodies. Our biologics production capabilities are scalable, which enables efficient management of our combined small and large molecule pipeline. Substantially all of our properties are held freehold, free of material encumbrances and we believe such properties are fit for their purposes.

As part of our overall risk management, we carefully consider the timing of investment to ensure that secure supply chains are in place for our products. We have a programme in place to provide appropriate supply capabilities for our new products, including an assessment of new technology needs.

## ENSURING PRODUCT QUALITY

We are committed to delivering assured product quality that underpins both the safety and efficacy of our medicines.

The manufacturing processes for chemical products and biologics can be very complex and must be conducted under rigorous standards of quality. Manufacturing plants and processes are subject to periodic inspections by regulators to ensure that manufacturers are complying with prescribed standards of operation. Regulators have the power to require, if they believe action is warranted, changes and improvements, to halt production and impose conditions that must be satisfied before production can resume. Regulatory standards also evolve over time as the industry develops new manufacturing techniques, so a process that may have been acceptable at one time may subsequently require changes.

The outcomes of our own routine internal inspections, as well as those conducted by regulatory authorities, are rigorously reviewed and, if required, actions are taken to improve quality and compliance consistently across the organisation. The results of all external inspections carried out during 2008 were generally satisfactory. All regulatory compliance observations that were raised during

inspections at our sites and at our partners' sites were resolved satisfactorily. Where appropriate, the experience and knowledge obtained as a result of these inspections is shared with other sites across the Group.

In March 2008, AstraZeneca Australia undertook a voluntary recall of four batches of Heparinised Saline 50IU/5ml because of the detection of a contaminant in the heparin raw material used in the manufacture of these batches. The heparin raw material was manufactured by a number of independent companies in China and sourced by AstraZeneca from an independent supplier. We communicated with all relevant stakeholders at the time of the recall. No adverse events were reported as a result of patients taking our heparinised saline product. As a result of this incident, we have taken steps to reinforce the security of our incoming materials supply chain, including strengthening our audit programme.

We continue to be actively involved through our membership in industry associations in influencing new product manufacturing regulations, both at national and international levels, primarily in Europe, the US and Japan.

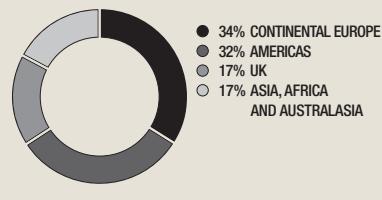
#### MANAGEMENT OF OUTSOURCING RISK

Our global procurement policies and integrated risk management processes are aimed at ensuring uninterrupted supply of sufficiently high quality raw materials and other key supplies, all of which are purchased from a range of suppliers. We focus on a range of risks to global supply, such as disasters that remove supply capability or the unavailability of key raw materials and work to ensure that these risks are effectively mitigated. Contingency plans include the appropriate use of dual or multiple suppliers and maintenance of appropriate stock levels. Although the price of raw materials may fluctuate from time to time, our global purchasing policies seek to avoid such fluctuations becoming material to our business.

Our risk management also includes mitigating any reputational risk associated with the use of third parties. As stated in our Code of Conduct, we are committed to working only with suppliers that embrace standards of ethical behaviour that are consistent with our own. See the Working with Suppliers section for more on this commitment on page 75.

## PEOPLE

### EMPLOYEES BY GEOGRAPHICAL LOCATION



With over 65,000 employees worldwide, we value the diverse skills and capabilities that a global workforce brings to our business. Aligning these skills and capabilities with strategic and operational needs, improving leadership capability, optimising performance and maintaining high levels of employee engagement are top priorities, alongside the integration of responsible business thinking across all our activities.

#### SETTING THE TARGETS

Clear targets and accountabilities are essential for ensuring that people understand what is expected of them as we work to deliver our business strategy. The AstraZeneca Board and Senior Executive Team are responsible for setting our high level strategic objectives and managing performance against these (see the Chief Executive Officer, Delegation of Authority and Senior Executive Team section on page 86). Managers across AstraZeneca are accountable for working with their teams to develop individual and team performance targets that are aligned to our high level objectives and against which individual and team contributions are measured and rewarded.

Our focus on optimising performance is reinforced by performance-related bonus and incentive plans. AstraZeneca also encourages employee share ownership by offering employees the opportunity to participate in various employee share plans, some of which are described in the Directors' Remuneration Report from page 174 and also in Note 24 to the Financial Statements on page 139.

#### LEARNING AND DEVELOPMENT

We encourage and support all our people in achieving their full potential with a range of high quality learning and development (L&D) opportunities around the world.

We are also in the process of adopting a new global approach, backed by the creation of a new global L&D organisation in 2008, which aims to ensure that standards of best L&D

practice are consistently applied in the most efficient way. During 2008, we also introduced an online resource that will, in time, make L&D tools and programmes available to all employees, creating a common platform that increases access to learning and supports self-development across the organisation. Implementation of further online L&D resources will continue during 2009.

Our leadership development frameworks are focused on six core capabilities which we believe are essential for strong and effective leadership: passion for customers; strategic thinking; acting decisively; driving performance; working collaboratively; and developing people and the organisation. These capabilities apply to all employees and are used in performance management, talent management, staffing and selection at all levels.

To ensure we maintain a flow of effective leaders, we work to identify individuals with the potential for increasingly more senior and complex roles. These talent pools provide succession candidates for a range of leadership roles across the Company that are critical to our continued business success.

#### COMMUNICATION AND DIALOGUE

We aim to provide an inclusive environment that encourages open discussion and debate at all levels across the Company. As well as line manager briefings and team meetings, we use a wide range of media to communicate with our employees around the world.

We also use a global employee survey (FOCUS) to track employee opinion across a range of key topic areas. The results, which are communicated to all employees, provide valuable insights that inform strategic planning across the business. To support our goal of promoting high levels of employee engagement, in 2008, our SET took the decision to run FOCUS annually, rather than every two years.

86% of our employees participated in the FOCUS 2008 survey – reflecting their continued confidence in this feedback mechanism. Results showed that employee engagement scores were very strong and we continue to outperform other pharmaceutical companies in this area. The results also indicated that people were seeing increased levels of cooperation between senior leaders, enabling more effective global and cross-functional working. The survey also identified some key areas that continue to require attention, in particular the need for improved communication from leaders about

AstraZeneca's strategic direction and the need to strengthen further our change management capabilities whilst continuing to invest in the development of our people. Our leaders take this feedback very seriously. New targets that address these issues have been included in the SET business performance management framework for 2009, and are focused on maintaining the already high levels of employee engagement, and improvements to the clarity of direction by senior leaders.

Our goal of creating a culture of open discussion and debate is supported by our well-developed arrangements for interactions with trade unions, elected employee representatives and local worker councils.

A challenge for us is ensuring a level of global consistency whilst allowing enough flexibility to support the local markets in building good relations with their workforces that take account of local laws and circumstances – which vary from country to country. To that end, relations with trade unions are nationally determined and managed locally in line with the applicable legal framework and standards of good practice. We provide training at a local level for managers in consultation requirements as well as relevant labour law, and we have a range of Human Resources (HR) and line manager networks for sharing experience and good practice, and promoting alignment across the organisation. At a global level, we have a Group Employee Relations Director who supports national managers in ensuring that their local activities are consistent with our high level principles.

As we continue to develop our global platform for managing HR going forward, we are working to ensure that the strength of our local management approaches is not undermined. This is particularly critical to the effective management of the impact of our current business changes.

Our continuing strategic drive to improve efficiency and effectiveness resulted in further planned reductions of the workforce in some areas of our business during 2008. New business reshaping activities, combined with revised estimates for the original 2007 programme (7,600 job reductions), will result in the overall programme delivering a reduction of approximately 15,000 positions by 2013. All reductions in positions are subject to consultations with works councils, trade unions and other employee representatives and in accordance with local labour laws.

To ensure that a consistent approach continues to be adopted throughout the programme, specific guidance is provided for the HR teams and line managers throughout the organisation. Our challenge is that there are differences in the legal frameworks and the customary practice in the different geographies which are most affected by the business changes, but the global guidance provided aims to ensure that the same or similar elements are included in local implementation, for example, open communication and consultation with employees, re-deployment support and appropriate financial arrangements. In line with our core values, we expect the people affected to be treated with respect, sensitivity, fairness and integrity at all times.

Our long-standing arrangements for interactions with trade unions, elected employee representatives and worker councils in the UK and Sweden provide the forum for productive discussion and collaboration with regard to our workforce reduction activity. Elsewhere, our processes follow the nationally determined arrangements.

#### HUMAN RIGHTS

We are fully supportive of the principles set out in the UN Declaration of Human Rights, and our Code of Conduct and supporting policies outline the high standards of employment practice with which everyone in AstraZeneca is expected to comply, both in spirit and letter. This includes, as a minimum, compliance with national legal requirements regarding wages and working hours. We also support the International Labour Organisation's standards regarding child labour and minimum working age.

We believe that every employee should be treated with the same respect and dignity. All judgements about people for the purposes of recruitment, hiring, compensation, development and promotion are made solely on the basis of a person's ability, experience, behaviour, work performance and demonstrated potential. As part of this, we are committed to complying with the provisions of all equality legislation including the UK Disability Discrimination Act 1995.

We continue to work to ensure that diversity is appropriately supported in our workforce, reflected in our leadership and integrated into business and people strategies. Diversity is included in our Talent Management SET objectives and we have a set of minimum standards that support global alignment in the integration of diversity and inclusion into our

human resources processes. As an indicator, 21% of the 82 senior managers reporting to the SET are women. The change from 2007 (26% of 81 senior managers) is not a result of reduced commitment to diversity, but is a consequence of our continued re-organisation of the Company at all levels, which continues to impact SET reporting lines.

We have made significant investment in improving our human resources information technology and are in the process of implementing a global system that will drive consistent people management and data capture worldwide. Launched in the UK, Sweden and China in 2006, the system is now in use in 16 countries which means we have consistent, detailed and integrated people information available at a global level covering over 40,000 employees.

#### SAFETY, HEALTH AND WELLBEING

Providing a safe workplace and promoting the health and wellbeing of all our people remains a core priority. A safe, healthy working environment not only benefits employees, it supports our business through improved employee engagement, retention and productivity.

We are committed to ensuring that safety and health risks are understood and managed responsibly. We continue to build on our traditional safety and health programmes, which focus on workplace behaviours and attitudes, whilst developing new approaches to managing stress and helping employees understand their personal health risks.

Wellbeing programmes vary according to health risk profile, function and local culture, and include general health initiatives aimed at increasing exercise levels, reducing smoking, improving nutrition and managing stress. We also have plans in place to deal with the potential threat of pandemic flu, including the provision of anti-virals for employees based in areas where adequate supplies may not be available through national treatment regimes.

Our key performance indicator (KPI) for safety, health and wellbeing combines the frequency rates for accidents resulting in fatal and serious injuries and new cases of occupational illness into one KPI, with an overall target of a 50% reduction in the combined rates by 2010, compared with a 2001/2002 reference point. The overall fatal and serious injury accident rate for AstraZeneca employees decreased by 14% to 2.28 per million hours worked in 2008, whilst the occupational illness rate increased by 5% to 1.04.

This equates to a combined reduction of 9% compared to 2007, and we are on track to achieve the targeted reduction by 2010.

We regret that during 2008 there were six fatal accidents, resulting in the deaths of three employees, two sub-contractors and five members of the public. Five of these accidents were vehicle related. Three people were killed in a single vehicle accident in China, two in a single vehicle accident in Saudi Arabia and one person killed in vehicle accidents in the US, Thailand and Egypt. The sixth accident occurred at one of our US sites where two sub-contractors were killed whilst engaged in construction work. Full investigations into the circumstances surrounding these accidents are being carried out.

We work hard to identify the root causes of any serious accident and use a range of investigation procedures to help us avoid repetition. Learning is shared with management and staff, and our conclusions about underlying causes are used to improve our management systems.

With the support of the Executive Vice-President of Operations, a global initiative to share learning from recent accidents and fatalities was implemented during 2008. A learning package was rolled out to employees in Operations and relevant areas of R&D, which focused on involving them in discussions about the root causes of these incidents, and on emphasising the need for everyone to challenge unsafe acts or working conditions.

We remain dissatisfied with our driver safety record and we are determined to improve our performance in this area. Our commitment centres on the promotion of driver safety across our sales forces worldwide, taking into account local conditions and opportunities for improvement.

In the US, where we have a sales force of around 6,500 people, our "Road Scholars" driver safety programme has been in place since 2005 and continues to be a valuable channel for building awareness and improving driver skills. During 2008, we further strengthened commitment and accountability in this area with the inclusion of a driver safety objective in the US performance management framework.

Outside the US, in our International Sales and Marketing Organisation (ISMO), where we have around 17,000 representatives across 61 countries, we are implementing a new driver safety programme, "DriveSuccess". Whilst taking account of the different driving environments across the various ISMO countries, "DriveSuccess" provides a high-level framework of common standards to be adopted by each country. The framework was rolled out across Europe, Central Eastern Europe, Middle East and Africa and Latin America during the last quarter of 2008, and Asia Pacific, including Japan, will follow in 2009.

## FINANCIAL REVIEW



"In 2008, sales increased by 3%, with sales growth driven by our key brands, the addition of MedImmune and the strong performance of Emerging Markets businesses which grew at 16%. Core operating margin increased by 1.6 percentage points in constant currency terms, as a result of improved efficiencies throughout the organisation and delivery of our restructuring initiatives. The improved Core operating margin translated 3% sales growth for the year into a 9% increase in Core operating

profit and an 8% increase in Core earnings per share to \$5.10.

Cash generation was strong in 2008; cash from operating activities increased by over \$1.2 billion, driven principally by an increase in earnings before interest, tax, depreciation and amortisation (EBITDA) and reduced working capital outflows. This enabled us to make the payment to Merck as part of the planned phased exit arrangements, invest in capital and intangible assets to drive future business growth and productivity and fund a 10% increase in the full year dividend, whilst at the same time reducing our net debt by more than \$1.9 billion to \$7.2 billion at the end of 2008. This strong performance puts us well ahead of our plan to reduce net debt to \$7 billion by the end of 2010.

We recently announced an expanded scope for our restructuring programme to drive further improvements in our long-term competitiveness. Overall, the programme is now anticipated to deliver \$2.1 billion in annual savings by the end of 2010 (up from \$1.4 billion), reaching \$2.5 billion per annum by 2013. The restructuring costs to deliver these benefits are now expected to be \$2.9 billion (up from \$2 billion).

Our continued efforts to drive efficiencies throughout the business, combined with a strong focus on converting growth in EBITDA into cash, should ensure resilient financial performance as we face an increasingly challenging external environment."

**SIMON LOWTH**  
Chief Financial Officer

The purpose of this Financial Review is to provide a balanced and comprehensive analysis of the financial performance of the business during 2008, the financial position as at the end of the year and the main business factors and trends which could affect the future financial performance of the business.

All growth rates in this section are expressed at constant exchange rates (CER) unless noted otherwise.

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## MEASURING PERFORMANCE

The following measures are referred to when reporting on our performance both in absolute terms but more often in comparison to earlier years in this section of the Directors' Report:

- > Reported performance. Reported performance takes into account all the factors (including those which we cannot influence, principally currency exchange rates) that have affected the results of our business as reflected in our Financial Statements prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and as issued by the International Accounting Standards Board.
- > Core financial measure. This is a non-GAAP measure because unlike reported performance it cannot be derived directly from the information in the Group's Financial Statements. This measure is adjusted to exclude certain significant items, such as charges and provisions related to restructuring and synergy programmes, amortisation and the impairment of the significant intangibles arising from corporate acquisitions and those related to our current and future exit arrangements with Merck in the US, and other specified items. See page 34 for a reconciliation of Core to reported performance.
- > Constant exchange rate (CER) growth rates. CER is also a non-GAAP measure. This measure removes the effects of currency movements (by retranslating the current year's performance at previous year's exchange rates and adjusting for other exchange effects, including hedging). A reconciliation to reported performance is provided on page 33.
- > Gross margin and operating profit margin percentages, which set out the progression of key performance margins and demonstrate the overall quality of the business.
- > Prescription volumes and trends for key products, which can represent the real business growth and the progress of individual products better and more immediately than invoiced sales.
- > Net debt, representing our interest bearing loans and borrowings less cash and cash equivalents and current investments.

We believe that Core financial and growth measures allow us to analyse more transparently the progress of our business. Our recent reported results have been impacted by the global restructuring and synergy programmes together with impacts arising from corporate acquisitions.

Accordingly, in this Financial Review, we show financial and growth measures adjusted for the effects of these items. For 2008, we adjust for the effects of the restructuring and synergy costs, amortisation and impairment charges recorded against MedImmune and amortisation arising on the historic arrangements with Merck.

CER measures allow us to focus on the changes in sales and expenses driven by volume, prices and cost levels relative to the prior period. Sales and cost growth expressed in CER allows management to understand the true local movement in sales and costs, in order to compare recent trends and relative return on investment. CER growth rates can be used to analyse sales in a number of ways but, most often, we consider CER growth by products and groups of products, and by countries and regions. CER sales growth can be further analysed into the impact of sales volumes and selling price. Similarly, CER cost growth helps us to focus on the real local change in costs so that we can manage the cost base effectively.

We recognise that CER growth rates and Core financial measures should not be used in isolation and, accordingly, we also discuss comparative reported growth measures that reflect all the factors that affect our business.

#### BUSINESS BACKGROUND AND MAJOR EVENTS AFFECTING 2008

The business background is covered in the Business Environment section of this Directors' Report and describes in detail the developments in both our products and geographical regions.

Our operations are focused on prescription pharmaceuticals, and over 97% of our sales are made in that sector. Sales of pharmaceutical products are directly influenced by medical needs and are generally paid for by health insurance schemes or national healthcare budgets. Our operating results can be affected by a number of factors other than the delivery of operating plans and normal competition:

- > The adverse impact on pharmaceutical prices as a result of the regulatory environment. For instance, although there is no direct governmental control on prices in the US, action from individual state programmes and health insurance bodies are leading to downward pressures on realised prices. In other parts of the world, there are a variety of price and volume control mechanisms and retrospective rebates based on sales levels that are imposed by governments.
- > The risk of generic competition following loss of patent exclusivity or patent expiry or an 'at risk' launch by a competitor, with the potential adverse effects on sales volumes and prices, for example, the launch of generic competition to both *Ethyol* and *Pulmicort Respules* in 2008 and *Toprol-XL* in 2006.
- > The timings of new product launches, which can be influenced by national regulators and the risk that such new products do not succeed as anticipated, together with the rate of sales growth and costs following new product launches.
- > Currency fluctuations. Our functional and reporting currency is the US dollar, but we have substantial exposures to other currencies, in particular the euro, Japanese yen, sterling and Swedish krona.
- > Macro factors such as greater demand from an ageing population and increasing requirements of servicing Emerging Markets.

Over the longer term, the success of our R&D is crucial, and we devote substantial resources to this area. The benefits of this investment emerge over the long term and there is considerable inherent uncertainty as to whether and when it will generate future products.

The most significant features of our financial results in 2008 are:

- > Reported sales of \$31,601 million, representing CER sales growth of 3% (7% reported).
- > Strong performance in Emerging Markets with CER sales growth of 16% (20% reported).
- > Continued strong performance from our five key products (*Arimidex*, *Crestor*, *Nexium*, *Seroquel* and *Symbicort*) with sales of \$17,110 million, up 9% at CER on prior year sales (12% reported).
- > Operating profit increased by 4% at CER (13% reported). Core operating profit increased by 9% at CER.
- > Earnings per share: \$4.20, an increase of 2% at CER (12% reported). Core earnings per share were \$5.10, an increase of 8% at CER.
- > Net cash inflow from operating activities increased to \$8,742 million (2007: \$7,510 million).
- > The partial retirement of Merck's interests in certain AstraZeneca products in the US took place on 17 March 2008 through a \$2.6 billion net payment to Merck.
- > Cash distributions to shareholders were \$3,349 million (2007: \$6,811 million) through dividend payments of \$2,739 million (2007: \$2,641 million) and share re-purchases of \$610 million (2007: \$4,170 million).
- > Net debt decreased to \$7,174 million (2007: \$9,112 million), a reduction of \$1,938 million.
- > Total restructuring and synergy costs associated with the global programme to reshape the cost base of the business, were \$881 million in 2008 (2007: \$966 million). This brings the total costs incurred to date to \$1,847 million.

## RESULTS OF OPERATIONS – SUMMARY ANALYSIS OF YEAR TO 31 DECEMBER 2008

The tables on this page and the following page show our sales analysed by therapy area, operating profit for 2008 compared to 2007 and a reconciliation of reported operating profit to Core operating profit for 2008 and 2007.

Sales increased by 7% on a reported basis and by 3% on a CER basis. Currency benefited reported sales by 4%. More details on our sales performance by therapy area are given on pages 53 to 70, in the sections titled 'Performance 2008'.

Core gross margin of 80.4% in the year was 0.8 percentage points higher than last year at CER (Reported: 79.1%: 0.8 percentage points higher). Principal drivers were lower payments to Merck (1.0 percentage points), continued efficiency gains and mix factors (1.2 percentage points), partially offset by higher royalty payments (0.6 percentage

points) and intangible asset impairments and other provisions (0.8 percentage points).

Core R&D costs of \$4,953 million were down 1% at CER over last year (Reported: 0%). The inclusion of a full year of MedImmune expense was offset by improved productivity and efficiency, restructuring benefits, portfolio changes and lower charges relating to intangible asset impairments charged to Core R&D expense.

Core SG&A costs of \$9,940 million were up 3% at CER (Reported: up 4%) due chiefly to the inclusion of a full year of MedImmune costs, increased investment in our Emerging Markets and some higher legal expenses.

Core other income of \$734 million was \$6 million higher than last year (Reported: decreased \$204 million) with MedImmune's licensing and royalty income streams offset by expected lower one-time gains and royalty income.

Impairment charges relating to intangible fixed assets totalled \$631 million during the year. Charges totalling \$407 million, including impairments in respect of *Ethyol* and HPV vaccines, have been excluded from Core operating profit. Charges totalling \$224 million, including \$115 million in respect of *Pulmicort Respules*, have been included in Core operating profit. Full details are provided on page 35.

Core operating profit was up 9% at CER from 2007 (Reported: up 13%). CER Core operating margin increased by 1.6 percentage points to 34.7% of sales as improvements in gross margin were offset by higher SG&A costs. Reported operating profits, at 28.9%, increased by 1.5 percentage points as a result of improvements in gross margin and R&D efficiencies which more than offset a modest increase in SG&A costs.

Net finance expense was \$463 million compared to \$111 million for 2007.

## SALES BY THERAPY AREA (2008 AND 2007)

	Reported \$m	CER growth \$m	Growth due to exchange effect \$m	2008		2007		2008 compared to 2007	
				Reported \$m	CER growth %	Reported \$m	CER growth %	Reported growth %	
Cardiovascular	6,963	29	248	6,686	–	6,686	–	–	4
Gastrointestinal	6,344	(275)	176	6,443	(4)	6,443	(4)	(2)	(2)
Infection and other <sup>1</sup>	2,451	706	31	1,714	41	1,714	41	43	43
Neuroscience	5,837	346	151	5,340	6	5,340	6	9	9
Oncology	4,954	(109)	244	4,819	(2)	4,819	(2)	3	3
Respiratory and Inflammation	4,128	278	139	3,711	7	3,711	7	11	11
Other businesses	924	54	24	846	6	846	6	9	9
<b>Total</b>	<b>31,601</b>	<b>1,029</b>	<b>1,013</b>	<b>29,559</b>	<b>3</b>	<b>29,559</b>	<b>3</b>	<b>7</b>	<b>7</b>

<sup>1</sup> Includes *Synagis* and *FluMist* which were acquired in June 2007.

## OPERATING PROFIT (2008 AND 2007)

	Reported \$m	CER growth \$m	Growth due to exchange effect \$m	2008		2007		Percentage of sales		2008 compared to 2007	
				Reported \$m	CER growth %	Reported \$m	Reported 2008 2007 %	Reported 2007 %		CER growth %	Reported growth %
Sales	31,601	1,029	1,013	29,559	3	29,559	3	7	7	3	7
Cost of sales	(6,598)	38	(217)	(6,419)	(20.9)	(20.9)	(21.7)	(21.7)	(1)	(1)	3
Gross profit	25,003	1,067	796	23,140	79.1	23,140	79.1	78.3	5	5	8
Distribution costs	(291)	(39)	(4)	(248)	(0.9)	(248)	(0.9)	(0.8)	16	16	17
Research and development	(5,179)	(88)	71	(5,162)	(16.4)	(5,162)	(16.4)	(17.5)	2	2	–
Selling, general and administrative costs	(10,913)	(433)	(116)	(10,364)	(34.6)	(10,364)	(34.6)	(35.1)	4	4	5
Other operating income and expense	524	(188)	(16)	728	1.7	728	1.7	2.5	(26)	(26)	(28)
<b>Operating profit</b>	<b>9,144</b>	<b>319</b>	<b>731</b>	<b>8,094</b>	<b>28.9</b>	<b>8,094</b>	<b>28.9</b>	<b>27.4</b>	<b>4</b>	<b>4</b>	<b>13</b>
Net finance expense	(463)			(111)		(111)					
Profit before tax	8,681			7,983		7,983					
Taxation	(2,551)			(2,356)		(2,356)					
<b>Profit for the period</b>	<b>6,130</b>			<b>5,627</b>		<b>5,627</b>					
Earnings per share	4.20			3.74		3.74					

Growth rates on line items below operating profit, where meaningful, are given elsewhere in this Report.

The increase in interest expense was driven by additional borrowings arising as a result of the acquisition of MedImmune in 2007. Our exposure to interest costs was reduced in 2008, from the closing position in 2007, as we moved debt used to finance the purchase of MedImmune from short-term, higher interest rate commercial paper, to longer-term debt financing at lower interest rates. The 2008 net finance expense benefited from a net fair value gain of \$130 million relating to two long-term bonds due to widening credit spreads. We anticipate that the fair value gain will largely reverse as credit markets stabilise.

The effective tax rate was 29.4% (2007: 29.5%).

Core earnings per share were \$5.10, an increase of 8% at CER on 2007, as the increase in Core operating profit and the benefit of a lower number of shares outstanding was partially offset by increased net finance expense. Reported earnings per share increased 12% to \$4.20.

#### GEOGRAPHICAL ANALYSIS

We discuss the geographical performances in the Geographic Review on pages 48 to 52.

#### FINANCIAL POSITION, INCLUDING CASH FLOW AND LIQUIDITY – 2008

All data in this section is on a reported basis (unless noted otherwise).

Total net assets increased by \$1,145 million to \$16,060 million. The increase due to Group profit of \$6,101 million was offset by dividends of \$2,767 million and net share re-purchases of \$451 million. Exchange movements arising on consolidation and actuarial losses also reduced net assets during the year.

#### RECONCILIATION OF REPORTED RESULTS TO CORE RESULTS

	Reported \$m	Restructuring and synergy costs \$m	MedImmune amortisation \$m	Ethyol and other impairments <sup>1</sup> \$m	Merck amortisation \$m	2008 Core \$m
<b>2008</b>						
Gross profit	25,003	405	–	–	–	25,408
Distribution costs	(291)	–	–	–	–	(291)
Research and development	(5,179)	166	–	60	–	(4,953)
Selling, general and administrative costs	(10,913)	310	307	257	99	(9,940)
Other operating income and expense	524	–	120	90	–	734
<b>Operating profit</b>	<b>9,144</b>	<b>881</b>	<b>427</b>	<b>407</b>	<b>99</b>	<b>10,958</b>
Net finance expense	(463)	–	–	–	–	(463)
Profit before tax	8,681	881	427	407	99	10,495
Taxation	(2,551)	(259)	(125)	(121)	–	(3,056)
<b>Profit for the period</b>	<b>6,130</b>	<b>622</b>	<b>302</b>	<b>286</b>	<b>99</b>	<b>7,439</b>
Earnings per share	4.20	0.43	0.21	0.19	0.07	5.10
	Reported \$m	Restructuring and synergy costs \$m	MedImmune amortisation \$m	Ethyol and other impairments \$m	Merck amortisation \$m	2007 Core \$m
<b>2007</b>						
Gross profit	23,140	415	–	–	–	23,555
Distribution costs	(248)	–	–	–	–	(248)
Research and development	(5,162)	73	–	–	–	(5,089)
Selling, general and administrative costs	(10,364)	478	255	–	96	(9,535)
Other operating income and expense	728	–	–	–	–	728
<b>Operating profit</b>	<b>8,094</b>	<b>966</b>	<b>255</b>	<b>–</b>	<b>96</b>	<b>9,411</b>
Net finance expense	(111)	–	–	–	–	(111)
Profit before tax	7,983	966	255	–	96	9,300
Taxation	(2,356)	(285)	(75)	–	–	(2,716)
<b>Profit for the period</b>	<b>5,627</b>	<b>681</b>	<b>180</b>	<b>–</b>	<b>96</b>	<b>6,584</b>
Earnings per share	3.74	0.46	0.12	–	0.06	4.38
	Core \$m	CER growth \$m	Growth due to exchange effect \$m	Core \$m	CER growth %	Total core growth %
<b>2007 to 2008</b>						
Gross profit	25,408	1,057	796	23,555	5	8
Distribution costs	(291)	(39)	(4)	(248)	16	17
Research and development	(4,953)	71	65	(5,089)	(1)	(3)
Selling, general and administrative costs	(9,940)	(289)	(116)	(9,535)	3	4
Other operating income and expense	734	23	(17)	728	3	1
<b>Operating profit</b>	<b>10,958</b>	<b>823</b>	<b>724</b>	<b>9,411</b>	<b>9</b>	<b>16</b>
Net finance expense	(463)			(111)		
Profit before tax	10,495			9,300		
Taxation	(3,056)			(2,716)		
<b>Profit for the period</b>	<b>7,439</b>			<b>6,584</b>		
Earnings per share	5.10			4.38		

<sup>1</sup> Includes \$150 million of impairments against intangible assets, acquired with MedImmune, relating to the return of rights to the heat shock protein 90 (Hsp90) drug candidates IPI-504 (MEDI-561) and the IPI-493 to Infinity Pharmaceuticals and revised forecasts for future royalties related to HPV vaccines. Also included is a \$257 million impairment charge for Ethyol following the 'at risk' launch of a generic competitor.

On 17 March, AstraZeneca paid \$2.6 billion to Merck. This payment resulted in AstraZeneca acquiring Merck's interests in certain AstraZeneca products including *Pulmicort*, *Rhinocort*, *Symbicort* and *Toprol-XL* and has been included in intangible assets as explained below.

#### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment fell by \$1,255 million to \$7,043 million primarily due to depreciation and impairments of \$1,182 million and exchange movements of \$1,131 million offset by additions of \$1,113 million.

#### GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangibles have increased by \$846 million to \$22,197 million.

The main components within goodwill are the amounts capitalised on acquisition of MedImmune of \$8,757 million and on the restructuring of our US joint venture with Merck in 1998. No significant amounts have been capitalised within goodwill in 2008. The total goodwill balance has reduced by \$10 million due to exchange rate movements.

Intangible assets have increased by \$856 million to \$12,323 million. Additions totalled \$2,941 million, amortisation was \$807 million and impairments totalled \$631 million. Exchange reduced intangibles by \$603 million.

Additions to intangible assets in 2008 included a payment made to Merck under pre-existing arrangements under which Merck's interests in our products in the US will be terminated (subject to the exercise of certain options). \$994 million of this payment relates to certain specific AstraZeneca products, including *Pulmicort*, *Rhinocort*, *Symbicort* and *Toprol-XL*. As a result of the payment AstraZeneca no longer has to pay contingent payments on these products to Merck and has obtained the ability to fully exploit these products and to fully exploit other opportunities in the Respiratory therapy area that AstraZeneca was previously prevented from doing by Merck's interests in these products. The remainder of the payment (\$1,656 million) represents payments on account for the product rights that will crystallise if we exercise options in 2010. Further details of this are included in Note 25 to the Financial Statements.

In March, a \$257 million intangible asset impairment charge was taken as a result of the entry of generic *Ethyol*, a product capitalised on the acquisition of MedImmune,

into the US market. The settlement of the *Pulmicort Respules* patent litigation triggered an impairment of \$115 million. The remaining impairments arise as a result of the termination of projects in development and a charge for \$91 million relating to the reassessment of the licensing income expected to be generated by the HPV cervical cancer vaccine.

Reported performance includes impairments in respect of *Ethyol*, HPV and other projects in development (principally the return of rights to Infinity Pharmaceuticals) which management believe are not part of Core performance. As a result, management has adjusted for impairments totalling \$407 million in presenting Core performance.

#### INVENTORIES

Inventories have decreased by \$483 million to \$1,636 million due to exchange movements of \$298 million along with an underlying reduction in inventory of \$185 million.

#### RECEIVABLES, PAYABLES AND PROVISIONS

Trade and other receivables increased by \$593 million to \$7,261 million. Exchange rate movements reduced receivables by \$429 million. The underlying increase of \$1,022 million was driven by increased sales in our Emerging Markets, the extension of major credit terms in the UK and increased insurance recoverables.

Trade and other payables increased by \$130 million, or \$675 million after removing the impacts of exchange rate movements, primarily due to increases in US managed market accruals. Trade payables include \$2,136 million in respect of accruals relating to rebates and reductions in our US market. These are explained and reconciled fully on pages 43 and 44.

Provisions increased by \$122 million driven mainly by increases in specific insurance and long-term provisions.

#### TAX PAYABLE AND RECEIVABLE

Net income tax payable has increased by \$667 million to \$1,968 million principally due to tax audit provisions and cash tax timing differences. Net deferred tax liabilities have decreased mainly as a result of the impact of actuarial losses suffered in the year, the amortisation and impairment of MedImmune intangibles and exchange benefits.

#### RETIREMENT BENEFIT OBLIGATIONS

Net retirement benefit obligations increased by \$734 million principally as a result of actuarial losses of \$1,232 million offset by exchange benefits of \$434 million. Approximately 95% of the Group's obligations are concentrated

in three countries. The following table shows the dollar effect of a 1% change in the discount rate on the obligations in those countries.

	-1%	+1%
UK (\$m)	739	(640)
US (\$m)	226	(199)
Sweden (\$m)	333	(263)

#### COMMITMENTS AND CONTINGENT LIABILITIES

Contingent liabilities principally relate to litigation including litigation relating to employment, product liability, commercial disputes, infringement of intellectual property rights, the validity of certain patents, anti-trust, securities laws and governmental investigations.

Most of the claims involve highly complex issues. Often, these issues are subject to substantial uncertainties and therefore the probability of a loss, if any, being sustained and an estimate of the amount of any loss are difficult to ascertain. Consequently, for a majority of these claims, it is not possible to make a reasonable estimate of the expected financial effect, if any, that will result from ultimate resolution of the proceedings. In these cases, AstraZeneca discloses information with respect to the nature and facts of the case.

Although there can be no assurance regarding the outcome of any of the legal proceedings, based on management's current and considered view of each situation, we do not currently expect them to have a materially adverse effect on our financial position. This position could of course change over time.

Assessments as to whether or not to recognise provisions or assets and of the amounts concerned usually involve a series of complex judgements about future events and can rely heavily on estimates and assumptions. AstraZeneca believes that the provisions recorded are adequate based on currently available information and that the insurance recoveries recorded will be received.

However, given the inherent uncertainties involved in assessing the outcomes of these cases and in estimating the amount of the potential losses and the associated insurance recoveries, we could in future periods incur judgements or insurance settlements that could have a material adverse effect on our results in any particular period.

Details of the more significant matters are set out in Note 25 to the Financial Statements.

**NET DEBT**

	2008 \$m	2007 \$m
Cash and short-term investments	6,044	7,760
Loans and borrowings	(15,156)	(1,223)
<b>Net (debt)/funds brought forward at 1 January</b>	<b>(9,112)</b>	<b>6,537</b>
Earnings before interest, tax, depreciation, amortisation and impairment	11,764	9,950
Movement in working capital	(210)	(443)
Tax paid	(2,209)	(2,563)
Interest paid	(690)	(335)
Other non-cash movements	87	901
<b>Net cash available from operating activities</b>	<b>8,742</b>	<b>7,510</b>
Purchase of intangibles	(2,944)	(549)
Other capital expenditure (net)	(1,057)	(1,076)
Acquisitions	–	(14,891)
<b>Investments</b>	<b>(4,001)</b>	<b>(16,516)</b>
Dividends	(2,739)	(2,641)
Net share re-purchases	(451)	(3,952)
<b>Distributions</b>	<b>(3,190)</b>	<b>(6,593)</b>
Other movements	387	(50)
<b>Net debt carried forward at 31 December</b>	<b>(7,174)</b>	<b>(9,112)</b>
Comprised of:		
Cash and short-term investments	4,674	6,044
Loans and borrowings	(11,848)	(15,156)

When fully implemented, these and other new business reshaping activities, combined with revised estimates for the original 2007 programme, will result in the overall programme delivering a reduction of approximately 15,000 positions by 2013. Reductions in positions are subject to consultations with works councils, trade unions and other employee representatives and in accordance with local labour laws.

As a result of the expanded scope of these business reshaping programmes, total programme charges for restructuring and synergies are now estimated to reach \$2,950 million. When fully implemented, programme benefits are now estimated to reach \$2.5 billion per annum.

**CASH FLOW**

Cash generated from operating activities was \$8,742 million in the year, compared with \$7,510 million in 2007. The increase of \$1,232 million was principally driven by an increase in operating profit before depreciation, amortisation and impairment costs of \$1,814 million, a decrease in tax payments of \$354 million and lower working capital outflows of \$233 million, offset by an increase in interest payments of \$355 million and a decrease in non-cash items of \$814 million which includes movements on provisions.

Net cash outflows from investing activities were \$3,896 million in the year compared with \$14,887 million in 2007.

Cash distributions to shareholders were \$3,349 million through dividend payments of \$2,739 million and share re-purchases of \$610 million.

During the year we issued a further €500 million, 5.625% 18-month bond as part of our re-financing programme, the proceeds of which have been used to re-finance maturing commercial paper.

Gross debt (including loans, short-term borrowings and overdrafts) was \$11,848 million as at 31 December 2008 (2007: \$15,156 million). Of this debt, \$993 million is due within one year (2007: \$4,280 million)

which we currently anticipate repaying from current cash balances of \$4,286 million and business cash flows, without the need to re-finance.

Net debt of \$7,174 million has decreased by \$1,938 million from 31 December 2007.

We continue to believe that, although our future operating cash flows are subject to a number of uncertainties, as specified in the Business Background section on page 32, our cash and funding resources will be sufficient to meet our forecasting requirements, including developing and launching new products, externalisation, our ongoing capital programme, our restructuring programme, debt servicing and repayment and shareholder distributions.

**RESTRUCTURING AND SYNERGY COSTS**

In 2008 we continued the global restructuring and synergy programmes announced in 2007. Costs for the full year totalled \$881 million (of which \$219 million are non-cash items).

This annual total reflects an extension in the scope of the previously announced \$1,975 million programme. New initiatives include further rationalisation of the global supply chain, additional restructuring of the sales and marketing organisation and business infrastructure.

## CAPITALISATION AND SHAREHOLDER RETURN

All data in this section is on a reported basis.

### CAPITALISATION

The total number of shares in issue at 31 December 2008 was 1,447 million. 4.1 million shares were issued in consideration of share option plans and employee share plans for a total of \$159 million. Reserves were reduced by \$2,277 million in 2008 due to the effect of exchange rates and actuarial losses. Shareholders equity increased by a net \$1,134 million to \$15,912 million at the year end. Minority interests increased to \$148 million (2007: \$137 million).

### DIVIDEND AND SHARE RE-PURCHASES

In line with the Board's distribution policy and its overall financial strategy to strike a balance between the interests of the business, shareholders and financial creditors, whilst maintaining strong investment grade credit rating, total share re-purchases in 2008 were 13.6 million shares at a total cost of \$610 million. This represented 0.9% of the share capital at the start of the year.

All shares re-purchased have been cancelled.

This brings the total number of shares re-purchased to date since the beginning of the re-purchase schemes in 1999, to 376.3 million shares at a total cost of \$18,099 million. The Board has decided that no share re-purchases will take place in 2009 in order to maintain the flexibility to invest in the business.

In the year, 4.1 million shares were issued in consideration of share option exercises for a total of \$159 million.

The Board regularly reviews its shareholder returns strategy, and in 2008 reaffirmed the dividend policy, which is to grow dividends in line with reported earnings before restructuring and synergy costs, with an aim to maintain at least two times dividend cover.

## DIVIDEND FOR 2008

	\$	Pence	SEK	Payment date
First interim dividend	0.55	27.8	3.34	15 September 2008
Second interim dividend	1.50	104.8	12.02	16 March 2009
<b>Total</b>	<b>2.05</b>	<b>132.6</b>	<b>15.36</b>	

## SUMMARY OF SHAREHOLDER DISTRIBUTIONS

	Shares re-purchased (million)	Cost \$m	Dividend per share \$	Total dividend cost \$m	Total shareholder distributions \$m
1999	4.4	183	0.700	1,242	1,425
2000	9.4	352	0.700	1,236	1,588
2001	23.5	1,080	0.700	1,225	2,305
2002	28.3	1,190	0.700	1,206	2,396
2003	27.2	1,154	0.795	1,350	2,504
2004	50.1	2,212	0.940	1,555	3,767
2005	67.7	3,001	1.300	2,068	5,069
2006	72.2	4,147	1.720	2,649	6,796
2007	79.9	4,170	1.870	2,740	6,910
2008	13.6	610	2.050	2,971 <sup>1</sup>	3,581 <sup>1</sup>
<b>Total</b>	<b>376.3</b>	<b>18,099</b>	<b>11.475</b>	<b>18,242</b>	<b>36,341</b>

<sup>1</sup> Total dividend cost estimated based upon number of shares in issue at 31 December 2008.

## FUTURE PROSPECTS

The Company has set its financial targets for 2009 in anticipation of the normal range of risks and opportunities typical for the pharmaceutical sector together with the turmoil in the financial markets and the broader economy. Management believes that successful execution of its business plan, underpinned by the underlying financial and operating strength of the Company, will result in achievement of a resilient financial performance even in this challenging business climate.

## RESULTS OF OPERATIONS – SUMMARY ANALYSIS OF YEAR TO 31 DECEMBER 2007

Core measures, as used in our commentary above on the financial results for 2008 (including comparison to 2007), are not referred to in the analysis of operating margin and profit for 2007 detailed below as this measure was introduced for 2008. Where appropriate, when comparing 2007 reported performance to 2006, the impact of the acquisition of MedImmune in 2007 is analysed to provide a more appropriate comparison between the two years.

The tables below show our sales by therapy area and operating profit for 2007 compared to 2006.

### REPORTED PERFORMANCE

Our 2007 sales increased by 12% from \$26,475 million to \$29,559 million, an increase reflecting both the acquisition of MedImmune and the entry of generic competition on all strengths of *Toprol-XL* in the US, as well as general business performance. Operating profit for 2007 fell by 1%, again reflecting the impacts of MedImmune and *Toprol-XL* together with restructuring and synergy

costs. Earnings per share for 2007 were \$3.74, a 3% decline from \$3.86 in 2006.

### PERFORMANCE – CER GROWTH RATES

#### Sales

Sales for 2007 increased 7%. The contribution to sales growth in 2007 from the acquisition of MedImmune more than offset the decline from *Toprol-XL* in the US. 2007 sales in the US were up 7%, and this was broadly similar to sales growth in the market if *Toprol-XL* and the impact of MedImmune were excluded. Sales outside the US were up 8%, comprising growth of 5% in Established Markets and 17% in the Emerging Markets.

For the second year, our portfolio in 2007 had 11 brands with annual sales greater than \$1 billion. The combined sales of our key products (*Arimidex*, *Crestor*, *Nexium*, *Seroquel* and *Symbicort*) grew by 11% in 2007 to \$15,344 million, and accounted for about 52% of our turnover.

Details on our 2007 sales performance by therapy area are given on pages 53 to 70, in the section for each individual therapy area titled 'Performance 2007'.

### GEOGRAPHICAL ANALYSIS

2007 sales by major region are included in the performance table on page 49 of the Geographical Review.

Sales in the US were \$13,366 million in 2007 (up 7%). In the US, sales of *Nexium*, *Seroquel*, *Crestor* and *Arimidex* were \$8,364 million, almost 63% of total US sales. *Symbicort* was launched in the US in the year with sales of \$50 million. Sales in Canada were \$1,145 million for 2007 (up 5%).

Sales in the rest of the world were \$15,048 million in 2007 (up 8%). Key products (*Crestor*, *Symbicort*, *Seroquel* and *Arimidex*) were up 20%. Latin America, Middle East and Africa, and Asia Pacific were up 18%. Spain and the UK had sales growths of 7% and 8% respectively. Sales in Germany continued to be impacted by doctors being encouraged to prescribe generics in 2006 and were down 3%. Sales growth of 11% was achieved in Japan in 2007.

## SALES BY THERAPY AREA (2007 AND 2006)

	Reported \$m	CER growth \$m	Growth due to exchange effects \$m	2007	2006	2007 compared to 2006	
				Reported \$m	CER growth %	Reported growth %	
Cardiovascular	6,686	292	276	6,118	5	9	
Gastrointestinal	6,443	(379)	191	6,631	(6)	(3)	
Infection and other	1,714	779	60	875	89	96	
Neuroscience	5,340	484	152	4,704	10	14	
Oncology	4,819	359	198	4,262	8	13	
Respiratory and Inflammation	3,711	369	191	3,151	12	18	
Others	846	79	33	734	11	15	
<b>Total</b>	<b>29,559</b>	<b>1,983</b>	<b>1,101</b>	<b>26,475</b>	<b>7</b>	<b>12</b>	

## OPERATING PROFIT (2007 AND 2006)

	Reported \$m	CER growth \$m	Growth due to exchange effects \$m	2007	2006	2007 compared to 2006		
				Reported \$m	2007 %	2006 %	CER growth %	Reported growth %
Sales	29,559	1,983	1,101	26,475			7	12
Cost of sales	(6,419)	(703)	(157)	(5,559)	(21.7)	(21.0)	13	15
Gross margin	23,140	1,280	944	20,916	78.3	79.0	6	11
Distribution costs	(248)	(7)	(15)	(226)	(0.8)	(0.9)	3	10
Research and development	(5,162)	(944)	(316)	(3,902)	(17.5)	(14.7)	24	32
Selling, general and administrative costs	(10,364)	(843)	(425)	(9,096)	(35.1)	(34.4)	9	14
Other operating income and expense	728	188	16	524	2.5	2.0	36	39
<b>Operating profit</b>	<b>8,094</b>	<b>(326)</b>	<b>204</b>	<b>8,216</b>	<b>27.4</b>	<b>31.0</b>	<b>(4)</b>	<b>(1)</b>

**OPERATING MARGIN AND RETAINED PROFIT**

Operating profit for 2007 was \$8,094 million, down 4% at CER. Excluding restructuring and synergy costs of \$966 million, 2007 operating profit increased to \$9,060 million (up 8% on 2006 at CER). This operating profit improvement was net of a reported \$1,187 million increase in R&D investment, and was fuelled by revenue growth, improved gross margin and lower expenditures in SG&A on a constant currency basis. Restructuring and synergy benefits of \$300 million were realised during 2007. Reported operating margin was 27.4%.

In 2007 reported gross margin decreased by 0.7 percentage points. After adjusting for the impact on gross margin of the acquisition of MedImmune (\$472 million) and restructuring and synergy costs (\$415 million), 2007 gross margin increased by 1.0 percentage points against 2006 to 80.0%. Principal drivers included reduced payments to Merck (0.7 percentage points), asset provisions booked during the prior period (0.4 percentage points) and favourable currency movements (0.2 percentage points). An adverse effect arose from increased royalty payments, which led to a 0.4 percentage point reduction.

R&D investment increased by 24% (CER growth) to \$5,162 million in 2007, 17.5% of sales, an increase of 2.8 percentage points. After adjusting for the impact of the acquisition of MedImmune (\$255 million) and restructuring and synergy costs (\$73 million), R&D expenditure was \$4,834 million in 2007, up 16% (CER growth) and 2.1 percentage points over 2006 due principally to increased activity levels and the effect of the externalisation strategy.

Selling, general and administrative costs in 2007 increased by 9% (CER growth) to \$10,364 million. After adjusting for the impact of the MedImmune acquisition (\$560 million) and restructuring and synergy costs (\$478 million) and currency impacts, SG&A costs were 2% lower than the same period in 2006, primarily as a result of operational efficiencies from our selling and marketing activities.

At \$728 million, other operating income and expense in 2007 was 36% higher than 2006. After adjusting for the impact of the MedImmune acquisition (which contributed

other income of \$169 million primarily through human papilloma virus vaccine royalty income), other income of \$559 million was \$35 million higher than 2006, as expected reductions in royalty income were more than offset by higher one-time gains and insurance recoveries.

Total charges of \$966 million were taken in respect of the restructuring and synergy programmes in 2007, of which \$723 million represent cash costs. Over the same period, productivity initiative benefits of \$250 million and synergy benefits of \$50 million have been realised.

MedImmune contributed an operating loss of \$178 million (which included amortisation costs of \$255 million) in 2007.

Net finance expense in 2007 was \$111 million in the full year (2006 income: \$327 million). The reduction from 2006 was principally attributable to the interest payable on the borrowings to acquire MedImmune, Inc. Interest expense on the new debt was \$446 million. The 2007 reported amounts include net income of \$34 million (2006: \$43 million) arising from employee benefit fund assets and liabilities reported under IAS 19 'Employee Benefits'.

The effective tax rate for 2007 was 29.5%, similar to the 29% for 2006. The slight increase for 2007 compared to 2006 reflected the combined effect of differences in the geographical mix of profits, the reversal of tax deductions relating to share-based payments, the reduction in the UK tax rate as applied to UK net deferred tax liabilities, and an increase in tax provisions principally in relation to global transfer pricing.

Reported earnings per share for 2007 were \$3.74 compared with \$3.86 in 2006, a decrease of 5%. After adjusting for the impact of restructuring and synergy costs, 2007 earnings per share rose from \$3.86 to \$4.20, an increase of 7%. Excluding the impact of MedImmune as well, earnings per share increased by 15% to \$4.52. The share re-purchase programme is calculated to have added 8 cents to EPS during 2007, after allowing for an estimate of interest income foregone.

## FINANCIAL POSITION, INCLUDING CASH FLOW AND LIQUIDITY – 2007

All data in this section is on an actual basis (unless noted otherwise).

The book value of our net assets decreased by \$501 million to \$14,915 million at the 2007 year end. Dividends of \$2,658 million and share re-purchases of \$4,170 million exceeded net profit of \$5,595 million, whilst net movements through other recognised income and expense (principally exchange and actuarial losses) increased net assets. The overall shape of the balance sheet was changed by the acquisition of MedImmune.

### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment rose from \$7,453 million to \$8,298 million at the end of 2007. The increase was due to continued investment across the business of \$1,169 million, particularly in R&D, the acquisition of MedImmune (\$593 million) and exchange impacts (\$350 million), offset by depreciation and impairment of \$1,182 million and disposals (\$92 million).

### GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangibles rose from \$4,204 million at the beginning of 2007 to \$21,351 million at 31 December 2007. The increase is due almost entirely to the acquisition of MedImmune. The goodwill arising on the acquisition of MedImmune amounted to \$8,757 million increasing the balance sheet total to \$9,884 million; the other major component of the carrying value of goodwill relates to the restructuring in 1998 of our joint venture arrangements with Merck.

Intangibles also increased in 2007, primarily as a result of the MedImmune acquisition, supplemented by other company acquisitions and ongoing in-licensing activities. Intangibles arising from the MedImmune acquisition comprised launched products of \$7,478 million (principally the respiratory syncytial virus (RSV) franchise, other products such as *FluMist* and *Ethyol*, together with contractual and licensing income) and in development projects amounting to \$597 million. In total, intangibles amount to \$11,467 million at the 2007 year end and, in addition to those arising from the MedImmune acquisition, include intangibles arising from the restructuring in 1998 of our joint venture arrangements

with Merck and the subsequent merger of Astra and Zeneca in 1999 (\$1,026 million), the acquisition of Cambridge Antibody Technology in 2006 (\$605 million), launched and in development product in-licensing activities (\$1,327 million) and software development costs (\$434 million).

### INVENTORIES

Inventories have decreased by \$131 million from \$2,250 million at the end of 2006 to \$2,119 million. This decrease represents an underlying improvement of \$442 million, offset by the acquisition of MedImmune and exchange effects.

### RECEIVABLES, PAYABLES AND PROVISIONS

Receivables have risen from \$5,561 million to \$6,668 million as at 31 December 2007, an increase of \$1,107 million. Higher sales in 2007, particularly in the US, Europe, China and from the impact of the MedImmune acquisition (whose sales are concentrated in the first and last quarters of the year), insurance recoveries, acquisition and exchange effects were the principal drivers, offset in part by the receipt of the second instalment in respect of the US anaesthetics business disposal in 2006.

Current payables also rose from \$6,295 million to \$6,968 million at the end of 2007. There was a small net underlying movement in trade creditors, other payables and accruals, with increases in deductions for chargebacks, rebates and returns in the US being offset by decreases in trade payables, particularly to Merck. However, exchange and the acquisition of MedImmune drove the overall balance up.

Provisions increased primarily as a result of the restructuring and synergy programmes undertaken during 2007, rising from \$366 million in 2006 to \$1,020 million at the end of 2007.

### DEBT

The acquisition of MedImmune was funded initially through drawing on a \$15 billion 364 day loan facility, which was subsequently re-financed with short-term US commercial paper. In the second half of 2007, we undertook a programme of issuing debt on the US and European markets, as follows:

### SEPTEMBER 2007

Floating rate	2009	\$650m
Fixed 5.4%	2012	\$1,750m
Fixed 5.9%	2017	\$1,750m
Fixed 6.45%	2037	\$2,750m
Fixed 5.125%	2015	€750m

### NOVEMBER 2007

Fixed 4.625%	2010	€750m
Fixed 5.75%	2031	£350m

\$750 million each of the 2012 and 2017 US dollar fixed rate debt was swapped into floating rates. As at 31 December 2007, we also had commercial paper outstanding amounting to \$4,112 million.

### TAX PAYABLE AND RECEIVABLE

Net income tax payables increased in 2007 due to tax audit provisions, less the settlement of tax on the disposal of the Humira™ royalty stream. Net deferred tax liabilities increased primarily due to the acquisition of MedImmune and the recognition of deferred tax liabilities in respect of intangible assets.

### CASH FLOW

We continued to be a highly cash-generative business. However, the cost of acquisition of MedImmune meant that our funds and debt profile changed in 2007.

Cash generated from operating activities was \$7,510 million in 2007, only slightly down on 2006 (\$7,693 million). The small decrease in operating profit was compensated for by an increase in non-cash items (\$638 million principally from unspent restructuring costs) and depreciation, amortisation and impairment (\$511 million). These compensating effects were offset by an increase in working capital requirements of \$551 million and additional tax and interest payments (\$394 million and \$265 million respectively).

Net cash outflows from investing activities were \$14,887 million in 2007 compared to \$272 million in 2006. Excluding the higher returns from movements in short term investments and fixed deposits and net disposals of non-current asset investments (\$1,280 million in 2007 compared to \$1,171 million in 2006), interest received and dividends paid by subsidiaries, cash outflow from investing activities was \$16,516 million in 2007, compared to \$1,791 million in 2006. This increase in outflow was due primarily to the acquisition of MedImmune, Inc.; other acquisitions included Arrow Therapeutics Limited, Atlantis Components Inc. and

Denics International Co. Ltd. Investment in intangible assets was at broadly similar levels to 2006, and there were significantly higher payments for property, plant and equipment through increased investment in facilities, particularly in research and development.

Cash returns in 2007 to shareholders were \$6,811 million (through share re-purchases of \$4,170 million and dividend payments of \$2,641 million), compared to \$6,367 million in 2006. After taking into account proceeds from the issue of share capital of \$218 million (2006: \$985 million), net share re-purchases rose from \$3,162 million to \$3,952 million in 2007.

Net funds of \$6,537 million at the beginning of 2007 had become net debt of \$9,112 million by the end of 2007.

#### INVESTMENTS, DIVESTMENTS AND CAPITAL EXPENDITURE

The major investment in 2007 was the acquisition of MedImmune.

On the acquisition of MedImmune, the purchase price for outstanding shares of \$13.9 billion was allocated between intangible assets of \$8.1 billion (including assets in respect of *Synagis* and motavizumab RSV franchise, *FluMist*, *Ethyol* and products in development), goodwill of \$8.8 billion and net liabilities of \$3.0 billion. This allocation, based on strict accounting requirements, does not allow for the separate recognition of valuable elements such as buyer specific synergies, potential additional indications for identified products or the premium attributable to a well established, highly regarded business in the innovative biologics market. Such elements are instead subsumed within goodwill, which is not amortised. This balance between goodwill and intangible assets results in an amortisation charge of approximately \$435 million per annum. Further details of this acquisition are included in Note 22 to the Financial Statements on page 130.

The other major company and product acquisitions in 2007 reflected our ongoing commitment to strengthening the product pipeline.

In 2007, we completed the acquisition of Arrow Therapeutics Limited at a net cost of \$143 million, strengthening our portfolio of promising anti-infective treatments and providing a technology platform in an area of research that complements our capabilities in anti-bacterials. We paid \$34 million to acquire the paediatric asthma business of

Verus Pharmaceuticals, Inc. which includes the North American rights to Captisol™-enabled budesonide solution and a proprietary albuterol formulation.

In the area of product acquisitions in 2007, we capitalised \$100 million in respect of the collaboration disclosed with Bristol-Myers Squibb (BMS) in respect of saxagliptin and dapagliflozin. A global licensing and research collaboration with Palatin Technologies Inc. to discover, develop and commercialise small molecule compounds that target melanocortin receptors for the treatment of obesity and related indications was entered into, with a \$10 million capitalised upfront payment. We have also entered a three-year research and development collaboration with Silence Therapeutics plc to discover and develop proprietary siRNA molecules primarily in the respiratory field but with the option to extend into other disease areas. The initial access fee of \$5 million was capitalised as an intangible asset and the \$10 million equity investment was capitalised as a non-current asset investment.

In respect of ongoing collaborations, we have made further milestone payments of \$20 million in 2007 in relation to the agreement with Protherics (upon the successful scale-up of the manufacturing process under the development and commercialisation agreement) and \$30 million under the agreement with POZEN (in relation to the execution of the revised agreement and recognition of successful proof of concept). We have also paid \$48 million for the last in a series of sales-based milestone payments in relation to *Zomig*.

Astra Tech acquired Atlantis Components, Inc., with its specialist CAD/CAM technology used to design and manufacture customised dental implant abutments, for \$71 million and Denics International Co. Ltd, its Japanese distributor for \$5 million. Intangible assets of \$121 million have been recognised (with associated deferred tax liability of \$48 million).

In October 2007, we decided, by mutual agreement, to end our collaboration with NPS Pharmaceuticals, Inc. to discover and develop drugs targeting metabotropic glutamate receptors (mGluRs). We have agreed to pay \$30 million to acquire NPS's assets relating to the collaboration.

In 2007, our recent focus on in-licensing opportunities with third parties resulted in additional intangible assets on the balance sheet. Should any of these products fail in development, the associated intangibles will need to be written off.

#### FINANCIAL RISK MANAGEMENT

##### FINANCIAL RISK MANAGEMENT POLICIES Insurance

Our risk management processes are described in the Risk section on pages 74 to 82. These processes enable us to identify risks that can be partly or entirely mitigated through use of insurance. We negotiate best available premium rates with insurance providers on the basis of our extensive risk management procedures. In the current insurance market, the level of cover is decreasing whilst premium rates are increasing. Rather than simply paying higher premiums for lower cover, we focus our insurance resources on the most critical areas, or where there is a legal requirement, and where we can get best value for money. Risks to which we pay particular attention include business interruption, Directors' and Officers' liability and property damage.

##### Taxation

Tax risk management forms an integrated part of the Group risk management processes. Our tax strategy is to manage tax risks and tax costs in a manner consistent with shareholders' best long-term interests, taking into account both economic and reputational factors. We draw a distinction between tax planning using artificial structures and optimising tax treatment of business transactions, and we only engage in the latter.

##### Treasury

The principal financial risks to which the Group is exposed are those of liquidity, interest rate, foreign currency and credit. The Group has a centralised treasury function to manage these risks in accordance with Board-approved policies. Specifically, liquidity risk is managed through maintaining access to a number of sources of funding to meet anticipated funding requirements, including committed bank facilities and cash resources. Interest rate risk is managed through maintaining a debt portfolio that is weighted towards fixed rates of interest. Accordingly the Group's net interest charge is not significantly affected by changes in floating rates of interest. We do not currently hedge the impact on earnings and cash flow of changes in exchange rates, with the exception of the currency exposure that arises between booking and settlement date on non-local currency purchases and sales by subsidiaries and the external dividend, along with certain non-US dollar debt. Credit risk is managed through setting and monitoring credit limits appropriate for the assessed risk of the counterparty.

Our risk management objectives and policies are described in further detail below and in the Risk section on pages 74 to 82.

### Capital management

The capital structure of the Group consists of shareholders equity (see Note 20 on page 129), debt (see Note 14 on page 119) and cash (see Note 13 on page 119). For the foreseeable future, the Board will maintain a capital structure that supports the Group's strategic objectives through:

- > Managing funding and liquidity risk
- > Optimising shareholder return
- > Maintaining a strong investment grade rating

Funding and liquidity risk are reviewed regularly by the Board and managed in accordance with policies described below. The Board's distribution policy comprises both a regular cash dividend and, subject to business needs, a share re-purchase component. The Board regularly reviews its shareholders' return strategy, and for 2008 reaffirmed the current dividend policy, which is to grow dividends in line with reported earnings before restructuring and synergy costs, with an aim to maintain at least two times dividend cover. With respect to share re-purchases, the Board decided in quarter three that no further share re-purchases should take place in 2008 in order to maintain the flexibility to invest in the business. For the same reason, the Board has decided that no share re-purchases will take place in 2009.

The Group's current long-term credit rating is A1 by Moody's and AA- by Standard and Poor's, both with a stable outlook.

### Liquidity risk

The Board reviews the Group's ongoing liquidity risks annually as part of the planning process. The Board considers short-term requirements against available sources of funding taking into account cash flow. The Group manages liquidity risk by maintaining access to a number of sources of funding, which are sufficient to meet anticipated funding requirements. Specifically, the Group uses US commercial paper, committed bank facilities and cash resources to manage short-term liquidity and manages long-term liquidity by raising funds through the capital markets. Facilities available to the Group are detailed in Note 15 to the Financial Statements on pages 120 to 121.

### Foreign exchange

The US dollar is the Group's most significant currency. As a consequence, the Group results

are presented in US dollars and exposures are managed against US dollars accordingly.

Approximately 57% of Group external sales in 2008 were denominated in currencies other than the US dollar, while a significant proportion of manufacturing and R&D costs were denominated in sterling and Swedish krona. Surplus cash generated by business units is substantially converted to, and held centrally, in US dollars. As a result, operating profit and total cash flow in US dollars will be affected by movements in exchange rates.

This currency exposure is managed centrally based on forecast cash flows for the currencies of Swedish krona, sterling, euro, Australian dollar, Canadian dollar and Japanese yen. The impact of movements in exchange rates is mitigated significantly by the correlations which exist between the major currencies to which the Group is exposed and the US dollar. Monitoring of currency exposures and correlations is undertaken on a regular basis and hedging is subject to pre-execution approval. Except as noted below, no hedges were outstanding at the year-end.

The Group will hold debt in non-US dollar currencies to the extent that there is an underlying net investment in the same currency and therefore a net investment hedge as defined by IFRS 7, can be applied. The €500 million 2010 bond issued in 2008 was issued in euros to match investors' appetite but currency swaps were transacted to convert it into a US dollar instrument. As at 31 December 2008, after currency swaps, 4.2% of interest bearing loans and borrowings were denominated in sterling and 17.8% of interest bearing loans and borrowings were denominated in euros.

The transaction exposures that arise from non-local currency sales and purchases by subsidiaries are, where practicable, fully hedged using forward foreign exchange contracts. In addition, the Group's external dividend, which is paid principally in sterling and Swedish krona, is fully hedged from announcement to payment date.

Sensitivity analysis considering the Group's exposure to exchange rate movements is detailed in Note 16 to the Financial Statements on pages 122 to 126.

### Interest rate risk

The Group maintains a mix of fixed and floating rate debt. The portion of fixed rate debt was approved by the Board and any variation requires Board approval. A significant portion

of the long-term debt entered into in 2007 in order to finance the acquisition of MedImmune, has been held at fixed rates of interest. The Group uses interest rate swaps and forward rate agreements to manage this mix.

As at 31 December 2008, the Group held interest rate swaps with a notional value of \$2.5 billion, converting the 5.4% callable bond maturing in 2014, and the 7% guaranteed debentures payable in 2023 to floating rates and partially converting the 5.4% callable bond maturing in 2012 and the 5.9% callable bond maturing in 2017 to floating rates. No new interest rate swaps were entered into during 2008. The majority of the Group's cash balances are held with third party fund managers with floating rates of interest being earned.

Sensitivity analysis considering the Group's exposure to interest rate movements is detailed in Note 16 to the Financial Statements on pages 122 to 126.

### Credit exposure

The Group is exposed to credit risk on financial assets, such as cash balances (including fixed deposits and cash and cash equivalents), derivative instruments, trade and other receivables. The Group is also exposed in its net asset position to its own credit risk in respect of the 2023 debentures and 2014 bonds which are accounted for at fair value through profit or loss.

During the year, the Company established a credit risk oversight group, consisting of senior members of the Finance function to monitor credit related risks and risk management processes, in response to the ongoing financial markets and economic uncertainty.

Trade receivable exposures are managed locally in the operating units where they arise and credit limits are set as deemed appropriate for the customer.

Exposure to financial counterparty credit risk is controlled by the treasury team centrally in establishing and monitoring counterparty limits, which are set according to the assessed risk of each counterparty. Centrally managed funds are invested entirely with counterparties whose credit rating is 'A' or better. During the year, funds held in money market funds have been progressively transferred to US Treasury funds, in light of the ongoing financial crisis.

External fund managers, who manage \$3.0 billion of the Group's cash, are rated AAA by Standard & Poor's.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our Financial Statements are prepared in accordance with International Accounting Standards and International Financial Reporting Standards (collectively "IFRSs") as adopted by the European Union ("adopted IFRS") and as issued by the International Accounting Standards Board and the accounting policies employed are set out under the heading 'Financial Statements – Accounting Policies' on pages 103 to 107. In applying these policies, we make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities. The actual outcome could differ from those estimates. Some of these policies require a high level of judgement, either because the areas are especially subjective or complex. We believe that the most critical accounting policies and significant areas of judgement and estimation are in:

- > Revenue recognition
- > Research and development
- > Goodwill and intangible assets
- > Litigation
- > Post-retirement benefits
- > Taxation
- > Share-based compensation.

### REVENUE RECOGNITION

Revenue is recorded at the invoiced amount (excluding inter-company sales and value added taxes) less movements in estimated accruals for product returns and rebates given to managed care and other customers – a particular feature in the US but also occurring in the rest of the world. Cash discounts for prompt payment are also deducted from sales. Revenue is recognised at the point of delivery, which is usually when title passes to the customer either on shipment or on receipt of goods by the

customer depending on local trading terms. Income from royalties and from disposals of intellectual property, brands and product lines are included in other operating income.

### Rebates and chargebacks

At the time of invoicing sales in the US, rebates and chargebacks that we expect to pay, in as little time as two weeks or as much as eight months, are estimated. These rebates typically arise from sales contracts with third party managed care organisations, hospitals, long-term care facilities, group purchasing organisations and various federal or state programmes (Medicaid "best price" contracts, supplemental rebates etc) and can be classified as follows:

- > Chargebacks, where we enter into arrangements under which certain parties, typically hospitals, the Department of Veterans Affairs and the Department of Defense, are able to buy products from wholesalers at the lower prices we have contracted with them. The chargeback is the difference between the price we invoice to the wholesaler and the contracted price charged by the wholesaler. Chargebacks are paid directly to the wholesalers.
- > Regulatory, including Medicaid and other federal and state programmes, where we pay rebates based on the specific terms of agreements in individual states which include product usage and information on best prices and average market prices benchmarks.
- > Contractual, under which entities such as third party managed care organisations, long-term care facilities and group purchasing organisations are entitled to rebates depending on specified performance provisions, which vary from contract to contract.

The effects of these deductions on our US pharmaceuticals turnover are set out below.

Accrual assumptions are built up on a product-by-product and customer-by-customer basis taking into account specific contract provisions coupled with expected performance and are then aggregated into a weighted average rebate accrual rate for each of our products. Accrual rates are reviewed and adjusted on a monthly basis. There may be further adjustments when actual rebates are invoiced based on utilisation information submitted to us (in the case of contractual rebates) and claims/ invoices are received (in the case of regulatory rebates and chargebacks). We believe that we have been reasonable in our estimates for future rebates using a similar methodology to that of previous years. Inevitably, however, such estimates involve judgements on aggregate future sales levels, segment mix and the respective customer contractual performance.

Cash discounts are offered to customers to encourage prompt payment. Accruals are calculated based on historical experience and are adjusted to reflect actual experience.

Industry practice in the US allows wholesalers and pharmacies to return unused stocks within six months of, and up to 12 months after, shelf-life expiry. At point of sale, we estimate the quantity and value of goods which may ultimately be returned. Our returns accruals are based on actual experience over the preceding 12 months for established products together with market related information such as estimated stock levels at wholesalers and competitor activity. For newly launched products, we use rates based on our experience with similar products or a pre-determined percentage.

	2008 \$m	2007 \$m	2006 \$m
Gross sales	20,029	18,456	16,577
Chargebacks	(1,726)	(1,130)	(975)
Regulatory – US government and state programmes	(1,005)	(732)	(532)
Contractual – Managed care and group purchasing organisation rebates	(3,658)	(3,179)	(2,413)
Cash and other discounts	(390)	(356)	(329)
Customer returns	(48)	(18)	(46)
Other	(167)	(145)	(256)
Net sales	13,035	12,896	12,026

For products facing generic competition (such as *Ethyol* and *Toprol-XL* in the US) our experience is that we usually lose the ability to estimate the levels of returns from wholesalers with the same degree of precision that we can for products still subject to patent protection. This is because we have limited or no insight into a number of areas – the actual timing of the launch of a generic competitor following regulatory approval of the generic product (for example, a generic manufacturer may or may not have produced adequate pre-launch inventory), the pricing and marketing strategy of the competitor, the take-up of the generic and (in cases where a generic manufacturer has approval to launch just one dose size in a market of several dose sizes) the likely level of switching from one dose to another. Under our accounting policy revenue is only recognised when the amount of the revenue can be measured reliably. Our approach in meeting this condition for products facing generic competition will

vary from product to product depending on the specific circumstances.

The movements on US pharmaceuticals revenue accruals, are set out below.

The adjustments in respect of prior years benefited reported US pharmaceuticals turnover by 0.4% in 2006, and decreased turnover by 0.4% in 2007 and 0.2% in 2008.

Chargebacks increased by \$173 million compared to 2007 due primarily to increased sales activities with US Government Agencies for *Nexium* and *Crestor*. Regulatory rebates increased by \$92 million in 2008 largely as a result of increased US State supplemental rebates for our key brands. In 2008 contractual rebates increased by \$184 million compared to 2007, mainly as a result of AstraZeneca's response to increased generic and competitor pricing pressures particularly in the PPI and statin markets.

The increase in contractual rebates in 2007 was driven by the introduction into the US market of generic omeprazole, with resultant price impacts on *Nexium*.

We have Distribution Service Agreements with major wholesaler buyers, which serve to reduce the speculative purchasing behaviour of the wholesalers and reduce short-term fluctuations in the level of inventory they hold. As a result, we believe inventory movements have been neutral across the year. We track wholesaler stock levels by product, using our own, third party and wholesaler data and, where we believe such distortions occur, we disclose in the Annual Report for each product and in aggregate where shipments may be out of line with underlying prescription trends. We do not offer any incentives to encourage wholesaler speculative buying and attempt, where possible, to restrict shipments to underlying demand when such speculation occurs.

	Brought forward 1 January 2006 \$m	Provision for current year \$m	Adjustment in respect of prior years \$m	Returns and payments \$m	Carried forward at 31 December 2006 \$m
Chargebacks	185	1,001	(26)	(1,068)	92
Regulatory – US government and state programmes	601	597	(65)	(819)	314
Contractual – Managed care and group purchasing organisation rebates	420	2,367	46	(2,198)	635
Cash and other discounts	27	329	–	(327)	29
Customer returns	167	46	–	(53)	160
Other	54	256	–	(263)	47
	1,454	4,596	(45)	(4,728)	1,277
	Brought forward 1 January 2007 \$m	Additions in respect of MedImmune \$m	Provision for current year \$m	Adjustment in respect of prior years \$m	Carried forward at 31 December 2007 \$m
Chargebacks	92	2	1,115	15	(1,038)
Regulatory – US government and state programmes	314	69	769	(37)	(687)
Contractual – Managed care and group purchasing organisation rebates	635	5	3,100	79	(2,919)
Cash and other discounts	29	1	356	–	(348)
Customer returns	160	1	19	(1)	(94)
Other	47	–	153	–	(147)
	1,277	78	5,512	56	(5,233)
					1,690
	Brought forward 1 January 2008 \$m	Provision for current year \$m	Adjustment in respect of prior years \$m	Returns and payments \$m	Carried forward at 31 December 2008 \$m
Chargebacks	186	1,745	(19)	(1,553)	359
Regulatory – US government and state programmes	428	997	8	(913)	520
Contractual – Managed care and group purchasing organisation rebates	900	3,622	36	(3,474)	1,084
Cash and other discounts	38	390	–	(389)	39
Customer returns	85	48	–	(56)	77
Other	53	167	–	(163)	57
	1,690	6,969	25	(6,548)	2,136

### Royalty income

Royalty income is recorded under other operating income in the Financial Statements. Royalties tend to be linked to levels of sales or production by a third party. At the time of preparing the Financial Statements, we may have to estimate the third party's sales or production when arriving at the royalty income to be included. These estimates, which may differ from actual sales or production, do not result in a material impact on reported other operating income.

### Sales of intangible assets

A consequence of charging all internal R&D expenditure to the income statement in the year that it is incurred (which is normal practice in the pharmaceutical industry) is that we own valuable intangible assets which are not recorded on the balance sheet. We also own acquired intangible assets which are included on the balance sheet. As a consequence of regular reviews of product strategy, from time to time we sell such assets and generate income. Sales of product lines are often accompanied by an agreement on our part to continue manufacturing the relevant product for a reasonable period (often about two years) whilst the purchaser constructs its own manufacturing facilities. The contracts typically involve the receipt of an upfront payment, which the contract attributes to the sale of the intangible assets, and ongoing receipts, which the contract attributes to the sale of the product we manufacture. In cases where the transaction has two or more components, we account for the delivered item (for example, the transfer of title to the intangible asset) as a separate unit of accounting and record revenue on delivery of that component provided that we can make a reasonable estimate of the fair value of the undelivered component. Where the fair market value of the undelivered component (for example a manufacturing agreement) exceeds the contracted price for that component we defer an appropriate element of the upfront consideration and amortise this over the performance period. However, where the fair market value of the undelivered component is equal to or lower than the contracted price for that component we treat the whole of the upfront amount as being attributable to the delivered intangible assets and recognise that part of the revenue upon delivery. No element of the contracted revenue related to the undelivered component is allocated to the sale

of the intangible asset. This is because the contracted revenue relating to the undelivered component is contingent on future events (such as sales) and so cannot be anticipated.

### RESEARCH AND DEVELOPMENT

Our business is underpinned by our marketed products and development portfolio. The R&D expenditure on internal activities to generate these products is generally charged to the income statement in the year that it is incurred. Purchases of intellectual property and product rights to supplement our R&D portfolio are capitalised as intangible assets. Such intangible assets are amortised from the launch of the underlying products and are tested for impairment both before and after launch. This policy is in line with practice adopted by major pharmaceutical companies.

### GOODWILL AND INTANGIBLE ASSETS

We have significant investments in goodwill and intangible assets as a result of acquisitions of businesses and purchases of such assets as product development and marketing rights.

For the purpose of impairment testing of goodwill, the Group is regarded as a single cash-generating unit.

The recoverable amount is based on value in use using discounted risk-adjusted projections of the Group's pre-tax cash flows over ten years, a period reflecting the average patent-protected lives of our current products. The projections include assumptions about product launches, competition from rival products and pricing policy as well as the possibility of generics entering the market. In setting these assumptions we consider our past experience, external sources of information (including information on expected increases and ageing of the populations in our Established Markets and the expanding patient population in newer markets), our knowledge of competitor activity and our assessment of future changes in the pharmaceutical industry. The 10 year period is covered by internal budgets and forecasts. Given that internal budgets and forecasts are prepared for all projections, no general growth rates are used to extrapolate internal budgets and forecasts for the purposes of determining value in use.

In arriving at value in use, we disaggregate our projected pre-tax cash flows into groups reflecting similar risks and tax effects. For each group of cash flows we use an appropriate

discount rate reflecting those risks and tax effects. In arriving at the appropriate discount rate for each group of cash flows, we adjust AstraZeneca's post-tax weighted average cost of capital (7.6% for 2008) to reflect the impact of risks and tax effects. The weighted average pre-tax discount rate we used was approximately 11%.

As a cross check, we compare our market capitalisation to the book value of our net assets and this indicates significant surplus at 31 December 2008.

No goodwill impairment was identified.

The Group has also performed sensitivity analysis calculations on the projections used and discount rate applied. The Directors have concluded that, given the significant headroom that exists, and the results of the sensitivity analysis performed, there is no significant risk that reasonable changes in key assumptions would cause the carrying value of goodwill to exceed its value in use.

Impairment reviews have been carried out on all intangibles that are in development (and not being amortised), all major intangibles acquired during the year, all intangibles that have had indications of impairment during the year and all intangibles recognised on the acquisition of MedImmune. Sales forecasts and specific allocated costs (which have both been subject to appropriate Senior Management sign off) are discounted using AstraZeneca's post-tax weighted average cost of capital.

The majority of our investments in intangible assets and goodwill arose from the restructuring of the Astra-Merck joint venture in 1998, the acquisition of MedImmune in 2007 and the payment to partially retire Merck's interests in our products in the US in 2008, and we are satisfied that the carrying values are fully justified by estimated future cash flows.

### LITIGATION

In the normal course of business, potential liabilities may arise from product-specific and general legal proceedings, from guarantees or from environmental liabilities connected with our current or former sites. Where we believe that potential liabilities have a less than 50% probability of crystallising or are very difficult to quantify reliably, we treat them as contingent liabilities.

These are not provided for but are disclosed in the Notes to the Financial Statements. Further details of these contingent liabilities are set out in Note 25 on page 144. Where it is considered more likely than not that an actual liability may crystallise, and this can be measured reliably, a provision is made. Although there can be no assurance regarding the outcome of legal proceedings, we do not currently expect them to have a materially adverse effect on our results in any particular period. We also have significant commitments that are not currently recognised in the balance sheet arising from our relationship with Merck. These are described more fully in Note 25 to the Financial Statements on page 144.

#### POST-RETIREMENT BENEFITS

We offer post-retirement benefit plans which cover many of our employees around the world. In keeping with local terms and conditions, most of these plans are 'defined contribution' in nature where the resulting income statement charge is fixed at a set level or is a set percentage of employees' pay. However, several plans, mainly in the UK (which has by far the largest single scheme), the US and Sweden, are defined benefit plans where benefits are based on employees' length of service and final salary (typically averaged over one, three or five years). The UK and US defined benefit schemes were closed to new entrants in 2000. All new employees in these countries are offered defined contribution schemes.

In applying IAS 19 'Employee Benefits', we recognise all actuarial gains and losses immediately through reserves. This methodology results in a less volatile income statement charge than under the alternative approach of recognising actuarial gains and losses over time. Investment decisions in respect of defined benefit schemes are based on underlying actuarial and economic circumstances with the intention of ensuring that the schemes have sufficient assets to meet liabilities as they fall due, rather than meeting accounting requirements. The trustees follow a strategy of awarding mandates to specialist, active investment managers which

results in a broad diversification of investment styles and asset classes. The investment approach is intended to produce less volatility in the plan asset returns.

In assessing the discount rate applied to the obligations, we have used rates on AA corporate bonds with durations corresponding to the maturities of those obligations.

In all cases, the pension costs recorded in the Financial Statements are assessed in accordance with the advice of independent qualified actuaries but require the exercise of significant judgement in relation to assumptions for future salary and pension increases, long-term price inflation and investment returns.

#### TAXATION

Accruals for tax contingencies require management to make judgements and estimates in relation to tax audit issues and exposures. Amounts accrued are based on management's interpretation of country-specific tax law and the likelihood of settlement. Tax benefits are not recognised unless the tax positions are probable of being sustained. Once considered to be probable, management reviews each material tax benefit to assess whether a provision should be taken against full recognition of the benefit on the basis of potential settlement through negotiation and/or litigation. All such provisions are included in creditors due within one year. Any recorded exposure to interest on tax liabilities is provided for in the tax charge.

AstraZeneca faces a number of transfer pricing audits in jurisdictions around the world and, in some cases, is in dispute with the tax authorities. These disputes usually result in taxable profits being increased in one territory and correspondingly decreased in another. Our balance sheet positions for these matters reflect appropriate corresponding relief in the territories affected. The total net accrual included in the Financial Statements to cover the worldwide exposure to transfer pricing audits is \$1,628 million, an increase of \$306 million due to a number of new audits, revisions of estimates relating to existing audits, offset by a number of negotiated settlements and exchange rate effects.

Included in the total net accrual are amounts in respect of the following transfer pricing arrangements:

- > AstraZeneca and Her Majesty's Revenue & Customs (HMRC) have made a joint referral to the UK Court in respect of transfer pricing between our UK and one of our overseas operations for the years 1996 to date as there continues to be a material difference between the Group's and HMRC's positions. An additional referral in respect of controlled foreign company aspects of the same case was made during 2008. Absent a negotiated settlement, litigation is set to commence in 2010.
- > AstraZeneca has applied for two advance pricing agreements (APAs) in relation to intra-group transactions between the UK and the US and the UK and Japan. Both APAs are being progressed through competent authority proceedings under the relevant double tax treaties.

Management continues to believe that AstraZeneca's positions on all its transfer pricing audits and disputes are robust and that AstraZeneca is adequately provided.

For transfer pricing audits where AstraZeneca and the tax authorities are in dispute, AstraZeneca estimates the potential for reasonably possible additional losses above and beyond the amount provided to be up to \$400 million; however, management believes that it is unlikely that these additional losses will arise. Of the remaining tax exposures, AstraZeneca does not expect material additional losses. It is not possible to estimate the timing of tax cash flows in relation to each outcome, however, it is anticipated that a number of significant disputes may be resolved over the next one to two years. Included in the provision is an amount of interest of \$365 million.

## PAYMENTS DUE BY PERIOD

	Less than 1 year \$m	1-3 years \$m	3-5 years \$m	Over 5 years \$m	Total \$m
Bank loans and other borrowings	1,616	2,800	2,665	12,478	19,559
Operating leases	101	131	81	145	458
Contracted capital expenditure	332	–	–	–	332
Total	2,049	2,931	2,746	12,623	20,349

### SHARE-BASED COMPENSATION

Through the Remuneration Committee we offer share and share option plans to certain employees as part of their compensation and benefits packages, designed to improve alignment of the interests of employees with shareholders. Costs of the plans are determined using valuation models such as Black-Scholes or a modified version of the binomial model. Valuation models require judgements to be made on inputs to the model. Further details of these are given in Note 24 to the Financial Statements.

### OFF-BALANCE SHEET TRANSACTIONS

#### AND COMMITMENTS

We have no off-balance sheet arrangements and our derivative activities are non-speculative. The table above sets out our minimum contractual obligations at the year end.

Our approach to the assessment has been to select key transaction and financial reporting processes in our largest operating units and a number of specialist areas such as financial consolidation and reporting, treasury operations and taxation so that, in aggregate, we have covered a significant proportion of each of the key line items in our Financial Statements. Each of these operating units and specialist areas has ensured that its relevant processes and controls are documented to appropriate standards, taking into account, in particular, the guidance provided by the Securities and Exchange Commission. We have also reviewed the structure and operation of our “entity level” control environment. This refers to the overarching control environment, including structure of reviews, checks and balances that are essential to the management of a well controlled business.

## OTHER ACCOUNTING INFORMATION

### INTERNATIONAL ACCOUNTING TRANSITION

On transition to using adopted IFRS in the year ended 31 December 2005, we took advantage of several optional exemptions available in IFRS 1 ‘First-time Adoption of International Financial Reporting Standards’. The major effects of these exemptions are detailed on page 106.

The Directors have concluded that our internal control over financial reporting is effective as at 31 December 2008 and the assessment is set out on page 98. KPMG Audit Plc have audited the effectiveness of internal control over financial reporting and, as noted on page 99, their report is unqualified.

### NEW ACCOUNTING STANDARDS

New International Financial Reporting Standards which have been issued (both adopted and not yet adopted) are discussed on pages 103 to 107.

### SARBANES-OXLEY ACT SECTION 404

As a consequence of our listing on the New York Stock Exchange, AstraZeneca is required to comply with those provisions of the US Sarbanes-Oxley Act applicable to foreign issuers. Section 404 of this legislation requires companies annually to assess and make public statements about the quality and effectiveness of their internal control over financial reporting.

## 2008 IN BRIEF

- > Despite a continually challenging environment, including generic pressure, combined sales of *Arimidex*, *Crestor*, *Nexium*, *Seroquel* and *Symbicort* up 5% in the US – 65% of our total US sales.
- > Maintained market position as the second largest brand name pharmaceutical company in Canada.
- > Solid sales performance in the Rest of World, up 5%.
- > Strong brand performance in Western Europe but intense competition and governmental controls over healthcare expenditure.
- > Strong volume growth from key products, *Crestor*, *Losec* and *Seroquel* in Japan.
- > Emerging Rest of World delivers strong sales growth, up 16% with Emerging Europe sales up 10% and Emerging Asia sales up 10%.
- > Continued expansion in China, including continued sales growth up 31%.
- > EU Commission of a Sectoral Inquiry into the pharmaceutical industry continues, with a final report expected in Spring 2009.

For more information regarding our products please refer to the relevant sections of the Therapy Area Review from page 53. Details of relevant continuing litigation can be found in Note 25 to the Financial Statements (from page 144) and details of relevant risks are set out in the Principal Risks and Uncertainties section (from page 76).

For the AstraZeneca definition of markets please see the Glossary on page 199.

## NORTH AMERICA

## US

Despite full generic competition to *Toprol-XL* and the growth in generic omeprazole, sales in the US increased 1% in 2008 to \$13,510 million (2007: \$13,366 million). Combined sales of *Arimidex*, *Crestor*, *Nexium*, *Seroquel*, and *Symbicort* were up 5% to \$8,803 million (2007: \$8,414 million) – 65% of our total US sales. AstraZeneca is currently the third largest pharmaceutical company in the US, with a 5.6% share of US prescription pharmaceutical sales. Sales for Aptium Oncology and Astra Tech fell by 2% and rose by 33% to \$395 million (2007: \$402 million) and \$80 million (2007: \$60 million), respectively.

*Nexium* continues to lead the branded proton pump inhibitor (PPI) market for new prescriptions, total prescriptions and total capsules dispensed. Generic pantoprazole showed strong growth after being introduced late in 2007 and together with generic omeprazole captured most of the market growth, resulting in price and share erosion across the entire branded PPI market. In the face of generic pressure, *Nexium* continued to fare better than its branded competitors with sales in 2008 down 8% to \$3,101 million (2007: \$3,383 million). During the year, the US Food and Drug Administration (FDA) approved the use of *Nexium* in children ages one to 11 years old for the short-term treatment of gastroesophageal reflux disease.

*Seroquel* maintained its strong position as the number one prescribed atypical anti-psychotic on the market, with sales up 5% to \$3,015 million (2007: \$2,863 million). *Seroquel* posted total prescription growth of 6.6% with an increase of one million prescriptions, outpacing the rate of market growth for anti-psychotics by almost two points, leading the market in absolute total prescription growth. During the year, the FDA approved *Seroquel* for the maintenance of bipolar disorder as adjunct therapy to lithium or divalproex. The FDA also approved *Seroquel XR* for the depressive episodes of bipolar disorder, the manic or mixed episodes associated with bipolar I disorder (as either monotherapy or adjunct therapy to lithium or divalproex), and for maintenance treatment of bipolar disorder as adjunct therapy to lithium or divalproex.

Supplemental new drug applications (sNDAs) were submitted to the FDA for use of *Seroquel XR* in adult patients for major depressive disorder (MDD) and generalised anxiety disorder (GAD). In December 2008, we received a Complete Response Letter from the FDA related to the MDD submission, while the GAD submission remains under review. We also submitted an sNDA to the FDA for use of *Seroquel* for treatment of schizophrenia in 13 to 17 year olds and for treatment of acute manic episodes of bipolar I disorder for 10 to 17 year olds. The US Prescribing Information for *Seroquel* and *Seroquel XR* is being updated to include new safety information regarding use in children and adolescents. *Seroquel* and *Seroquel XR* are not approved currently for use in paediatric patients under 18 years of age.

*Crestor* sales were up 18% to \$1,678 million (2007: \$1,424 million) with a total prescription growth of 10.8%, and was the only branded statin to grow in total prescriptions throughout 2008 despite generic pressure. The new indication to slow the progression of atherosclerosis in adult patients with elevated cholesterol, an important differentiator from other products in the cholesterol-lowering market, was successfully introduced and awareness amongst physicians is high. Under the terms of an agreement executed in November 2008, Abbott obtained the non-exclusive right to promote *Crestor* alongside AstraZeneca in the US (excluding Puerto Rico) increasing *Crestor*'s profile and share of voice. New data presented in November 2008 from the JUPITER study demonstrated that *Crestor* 20mg significantly reduced major cardiovascular (CV) events – defined by the study as the combined risk of myocardial infarction, stroke, arterial revascularisation, hospitalisation for unstable angina, or death from CV causes – by 44% compared to placebo among men and women with elevated hsCRP (high-sensitivity C-reactive protein) but low to normal cholesterol levels. hsCRP is a recognised marker of inflammation that is associated with an increased risk of atherosclerotic CV events. The JUPITER results also showed that for patients in the trial taking *Crestor*, the combined risk of heart attack, stroke or CV death was reduced by nearly half. We expect to file a regulatory submission with the FDA that includes the JUPITER data in the first half of 2009 and, if approved, will begin promotional activities within the approved labelling.

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006		2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	
US	13,510	142	2	13,366	917	–	12,449	1	1	7	7	
Canada	1,275	95	35	1,145	54	60	1,031	8	11	5	11	
<b>North America</b>	<b>14,785</b>	<b>237</b>	<b>37</b>	<b>14,511</b>	<b>971</b>	<b>60</b>	<b>13,480</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>8</b>	
Western Europe	9,743	55	573	9,115	282	760	8,073	1	7	3	13	
Japan	1,957	73	223	1,661	170	(12)	1,503	4	18	11	11	
Other Established ROW	843	107	21	715	83	77	555	15	18	15	29	
<b>Established ROW</b>	<b>12,543</b>	<b>235</b>	<b>817</b>	<b>11,491</b>	<b>535</b>	<b>825</b>	<b>10,131</b>	<b>2</b>	<b>9</b>	<b>5</b>	<b>13</b>	
Emerging Europe	1,215	102	85	1,028	102	95	831	10	18	12	24	
China	627	136	54	437	91	18	328	31	43	28	33	
Emerging Asia Pacific	802	72	(19)	749	62	41	646	10	7	10	16	
Other Emerging ROW	1,629	247	39	1,343	223	61	1,059	18	21	21	27	
<b>Emerging ROW</b>	<b>4,273</b>	<b>557</b>	<b>159</b>	<b>3,557</b>	<b>478</b>	<b>215</b>	<b>2,864</b>	<b>16</b>	<b>20</b>	<b>17</b>	<b>24</b>	
<b>Total sales</b>	<b>31,601</b>	<b>1,029</b>	<b>1,013</b>	<b>29,559</b>	<b>1,984</b>	<b>1,100</b>	<b>26,475</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>12</b>	

In another agreement with Abbott, we are investigating the fixed dose combination of the active ingredients in Crestor (rosuvastatin calcium) and Trilipix™ (fenofibric acid) for the treatment of mixed dyslipidaemia. A Phase III trial in 2008 demonstrated that a combination of rosuvastatin calcium and fenofibric acid delivers greater improvements in treating all three key lipids (LDL, HDL and triglycerides) than the pre-specified monotherapy comparators. Currently, dyslipidaemia affects more than 100 million US residents and has been shown to play a pivotal role in the development of atherosclerosis and consequently, cardiovascular disease. Patients with mixed dyslipidaemia are expected to become more prominent segments of the dyslipidaemic population. Abbott obtained approval of Trilipix™ in December 2008 as the first and only fibrate labelled for use with a statin.

To maximise the value of Merrem IV during the year we announced an agreement with Cubist, who will provide promotional and scientific affairs support for Merrem IV in the US and Puerto Rico.

Arimidex continued to perform well with sales up 9% to \$754 million (2007: \$694 million) for the full year. Arimidex continues to be the market leader in new prescriptions for branded hormonal treatments for breast cancer in the US.

In September 2008, an additional six-month period of exclusivity was granted to market Casodex for its licensed advanced prostate cancer indication until 1 April 2009.

Pulmicort Respules, the only inhaled corticosteroid for the treatment of asthma approved in the US for children as young as 12 months, showed strong sales growth with sales up 2% to \$982 million (2007: \$964 million). On 23 September 2008, the US District Court for the District of New Jersey denied a motion filed by Teva Pharmaceuticals Ltd. for summary judgment of no infringement in the Pulmicort Respules patent litigation. On 19 November 2008, the same court awarded a temporary restraining order against Teva Pharmaceuticals after Teva launched its generic product 'at risk' on 18 November 2008. On 25 November 2008, the parties settled the matter and AstraZeneca granted Teva a licence to launch its generic product in late 2009.

In its first full year after launch in June 2007, Symbicort Rapihaler (pMDI) continued to deliver steady growth with sales up 410% to \$255 million (2007: \$50 million). Widespread physician experience and growing appreciation of the differentiating feature of control plus fast onset has led to the product surpassing a 10% new prescription share of the inhaled corticosteroid/long acting beta agonist market. Symbicort is now prescribed to one in five of all patients that are new to combination therapy.

In 2008, two sNDAs were submitted to the FDA: one for the use of Symbicort in chronic obstructive pulmonary disease and another for its use in paediatric asthma for ages six to 12. In October 2008, the pMDI device was enhanced with an actuation counter.

Synagis is the only FDA-approved monoclonal antibody (MAb) to help protect high-risk babies against severe Respiratory Syncytial Virus (RSV) disease. In its first full year in AstraZeneca, sales in the US were \$923 million.

In 2008, distribution agreements continued with Par Pharmaceutical for all available strengths of generic metoprolol succinate. Also, Ranbaxy Pharmaceuticals began distribution of authorised generics of both felodipine and 40mg omeprazole.

Currently, there is no direct government control of prices for commercial prescription drug sales in the US. However, some publicly funded programmes – such as Medicaid and TRICARE (Department of Veterans Affairs) – have statutorily mandated rebates that have the effect of price controls for these programmes. Additionally, pressure on pricing, availability and utilisation of prescription drugs for both commercial and public payers continues to increase, driven by, among other things, an increased focus on generic alternatives. Primary drivers of increased generic use are budgetary policies within healthcare systems and providers, including the use of "generics only" formularies, and increases in patient co-insurance or co-payments. While it is unlikely that there will be widespread adoption of a broad national price control scheme in the near term, there will continue to be increased attention to pharmaceutical prices and their impact on healthcare costs for the foreseeable future.

In the current political climate, policymakers are likely to consider healthcare reform a top priority. The reauthorisation of the State Childrens' Health Insurance Program (SCHIP), a joint federal-state programme to expand healthcare coverage (including prescription drug coverage) for qualifying children, is poised to be one of the first healthcare reform proposals debated in the 111th Congress. A sustained focus on containing prescription drug costs is also likely, which could include proposals to allow the government to negotiate Medicare Part D prices directly with the pharmaceutical industry, increase manufacturers' Medicaid drug rebate payments under the Medicaid drug rebate statute, and/or expand Medicaid rebates for patients who qualify for both Medicaid and Medicare (so-called 'dual eligibles'). Additionally, there could be efforts to pass legislation implementing comparative effectiveness research requirements and/or legislation allowing for the commercial importation of drugs into the US from selected countries by certain individual consumers, pharmacies and drug wholesalers. Finally, proposals that would require disclosure of payments to healthcare professionals (eg for speaker contracts) are also being considered at the state and federal levels.

In its third year of operation, the Medicare Part D prescription drug programme maintained high levels of enrollment and beneficiary satisfaction, achieved prescription volume growth similar to other mature markets and provided access to our medicines for a large segment of the patient population. Through the AZ&Me Prescription Savings Programme for Patients with Medicare Part D, AstraZeneca provides prescription access to financially needy Medicare D beneficiaries. Although difficult to quantify, Medicare Part D has had an indirect effect on pricing in the broader US market. Despite the pricing challenges, overall access in key accounts was maintained or improved in 2008. It is difficult to predict fully the longer-term effects of this initiative on our business.

We continue to support My Medicare Matters, a community based outreach and education programme, in partnership with the National Council on Aging. Funding from AstraZeneca also supports MyMedicareCommunity.org, an on-line community for grass roots organisations serving people with Medicare. During 2007 and 2008, we supported a pilot grant programme focused on testing new approaches to finding and enrolling eligible people in the Medicare's Low-Income Subsidy (LIS) programme. Over 40,000 LIS applications were submitted as a result of these demonstration projects.

Additionally, AstraZeneca has been providing patient assistance to the uninsured for 30 years and, in the last six years, has provided more than \$3 billion in savings to more than one million patients in the US and Puerto Rico. Last year alone, we provided more than \$612 million in savings to approximately 440,000 people without drug coverage (approximately 2.7 million prescriptions).

#### CANADA

Despite the entry of the generic forms of *Seroquel IR*, sales in Canada increased by 8% (+11% reported) to \$1,275 million (2007: \$1,145 million). Combined sales of *Crestor*, *Nexium*, *Seroquel* and *Atacand* were up 18% to over \$864 million (2007: \$713 million) with *Crestor*, *Seroquel* and *Nexium* among the top 20 prescription products in Canada by sales.

We remain the second largest brand name pharmaceutical company in Canada. *Crestor* maintained its number two ranking in the statin market and was the fastest-growing product in both new and total prescription segments (25.9% and 32.0% growth respectively). *Crestor* is also the third largest product in Canada by sales. Together, *Seroquel XR* and *Seroquel IR* remain the leaders in new and total prescriptions within the atypical anti-psychotics market. *Atacand* continues to outperform the anti-hypertensive market, with total prescription growth of over 15.0% compared with market growth of only 7.4%. Several key regulatory approvals were achieved in Canada in 2008. Canada was the first country in which we gained regulatory approval for *Seroquel XR* for the treatment of bipolar mania, with *Seroquel XR* and *Seroquel IR* also approved for the treatment of bipolar depression (approvals were received eight months and five months respectively ahead of standard Health Canada review timelines). In addition, a new tablet strength for *Atacand* (32mg) was approved by Health Canada.

Organisational efficiencies were gained with the closure of the Canadian packaging plant and transfer of product packaging to the Newark, Delaware facility, and further efficiencies were obtained through the movement to common North American technology platforms.

The Canadian government has instituted a Health Technology Assessment appraisal system through their Common Drug review process which rejects almost six out of 10 new medications. The Patented Medicine Prices Review Board has the role of setting

the maximum non-excessive price in the market. For patients to gain optimal access to medicines, they then need to be listed on provincial formularies. This long process means patients in Canada can typically wait over two years following the regulatory approval for access to be granted.

The different provinces have adopted different approaches to pharmaceutical funding, from one end of the continuum in Quebec with more open access to more restricted access, therapeutic substitution and price tendering on the horizon in British Columbia. The trend in Canada indicates provinces will increase their access restrictions and drive prices down while the complex reimbursement system will continue to result in access delays.

#### REST OF WORLD

Sales in the rest of the world performed strongly in 2008, up 5% (+12% reported) to \$16,816 million (2007: \$15,048 million). Key products (*Arimidex*, *Crestor*, *Nexium*, *Seroquel* and *Symbicort*) delivered a strong performance, up 14% (+20% reported) with sales of \$7,413 million (2007: \$6,189 million). Latin America, the Middle East and Africa and Asia Pacific regions delivered particularly strong sales, up 13% (+19% reported) with sales of \$5,858 million (2007: \$4,906 million).

#### ESTABLISHED REST OF WORLD

Sales in our Established Rest of World Markets increased by 2% (+9% reported), with good growth from *Crestor*, *Seroquel* and *Symbicort* and our oncology products, together with *Synagis*, offsetting declines in sales of our proton pump inhibitors in Western Europe.

#### WESTERN EUROPE

In Western Europe, we saw a flat market with overall growth of 1% (+7% reported). This reflected decreasing sales in France (down 1%, +7% reported), Germany (down 2%, +6% reported), Italy (down 6%, +2% reported) and Spain (down 8%, -1% reported), partly offset by strong growth in the UK (up 8%, +2% reported). Sales in established European markets were mainly impacted by the loss of patent/marketing exclusivity on *Casodex*, by government initiatives to contain drug expenditures and by the loss of sales due to an ageing portfolio of mature brands. These impacts were partly offset by continued strong performance of key products (mainly *Crestor* and *Seroquel*).

We have continued with our programme of resource management in Western Europe and reduced costs by \$159 million and headcount by 618 during 2008.

Overall our sales in France were down 1% (+7% reported) to \$1,922 million (2007: \$1,794 million). The strong performance of *Crestor* and *Nexium*, which gained significant market share from competitors, was offset by the loss of patent/marketing exclusivity expiry for *Casodex*.

In Germany, sales were down 2% (+6% reported) to \$1,307 million (2007: \$1,233 million), mainly due to the *Casodex* patent/marketing exclusivity expiry and the government restriction on access to *Nexium* leading to a reduction in sales of 34% over last year. *Seroquel* continued to grow well with 27% growth (+38% reported) reaching 29.5% of the market for atypical anti-psychotics.

In the UK, sales were up 8% (+2% reported) to \$1,020 million (2007: \$1,004 million) driven by *Symbicort* (+34%, +25% reported), *Seroquel* (+32%, +22% reported), and *Arimidex* (+8%, +1% reported). Many of our other brands also performed well with *Merrem* (+13%, +6% reported) being of particular note. Competition remained intense but our key brands gained market share in their respective segments. Especially strong were *Seroquel* and *Symbicort* achieving gains of 2.4 and 1.3 percentage points respectively. The UK Government and pharmaceutical industry have entered into 'terms of reference' discussions concerning potential changes to the pricing and reimbursement scheme. The impact of these changes is likely to be \$90 million in 2009.

In Italy, *Crestor* performed strongly increasing its sales by 12% (+22% reported). The specialty care brands also showed good growth with *Seroquel* increasing sales by 19% (+28% reported) with 32.9% of the market for atypical anti-psychotics and *Arimidex* increasing sales by 12% (+21% reported) with 32.0% of the market for aromatase inhibitors and tamoxifen. However, overall sales declined by 6% (+2% reported) to \$1,323 million (2007: \$1,294 million) as a result of reference pricing at the regional level on PPIs and measures to control their prescribing by physicians, combined with *Casodex* patent/marketing exclusivity expiry.

In Spain, sales were down 8% (-1% reported) to \$863 million (2007: \$868 million) due to *Symbicort* (-7%, +1% reported) and generic competition for *Casodex* and *Arimidex*.

*Synagis* sales outside the US are undertaken through a subsidiary of Abbott Laboratories with revenue of \$307 million (\$169 million in the seven months from June to December 2007). We estimate that about 36% of sales arise in Western Europe, about 32% in Japan and over 7% in Canada. Strong growth has been recorded in Latin America in 2008.

Most governments in Europe directly intervene to control the price and reimbursement of medicines. The decision-making power of prescribers in Europe has been eroded in favour of a diverse range of payers. While the systems to control pharmaceutical spending vary, they all have had a noticeable negative impact on the uptake and availability of innovative medicines. Several governments have imposed price reductions and increased the use of generic medicines as part of healthcare expenditure control. Several countries are applying strict tests of cost-effectiveness of medicines, which has reduced access of European patients to medicines in areas of high unmet need. These and other measures all contribute to an increasingly tough environment for branded pharmaceuticals in Europe. However, the anticipated radical change in the UK pharmaceutical system towards direct government control of prices was abandoned. Parallel trading of branded pharmaceuticals continues to challenge the European pharmaceutical market; a report commissioned for the EU Commission acknowledged this and also highlighted the negative impact of parallel trading on patient safety.

In January 2008 AstraZeneca, together with several other companies, was the subject of an unannounced inspection simultaneous with the launch by the EU Commission (Commission) of a Sectoral Inquiry (Inquiry) into the pharmaceutical industry. The Inquiry relates to the introduction of innovative and generic medicines and covers commercial and other practices, including the use of patents. On 28 November 2008 the Commission published its preliminary report. The report does not identify wrongdoing by any individual companies but is stated to provide a factual basis for further consideration. The Commission has stated that it will commence individual investigations where there are indications that competition rules have been breached. The preliminary report focuses on a number of issues relating to competition in the EU, referring to strategies which the Commission believes pharmaceutical companies use to block or delay generic entry. Such strategies include: patent filings and enforcement;

patent settlement agreements and other agreements; interventions before national regulatory authorities; and life-cycle management strategies.

A final report is expected in Spring 2009. AstraZeneca has been co-operating fully with the Commission and participating in European Federation for Pharmaceutical Industries and Associations activities.

## JAPAN

In Japan, we were the fifth fastest-growing company amongst the top 15 pharmaceutical companies, maintaining our market ranking of number 12 in 2008. Strong volume growth from key products offset the biennial government review of downward drug prices to deliver sales up 4% (+18% reported) to \$1,957 million (2007: \$1,661 million). The key drivers of growth being the continued success of *Crestor* (+93%, +118% reported), the continued growth of *Losec* (+5%, +18% reported) and the increased penetration of *Seroquel* (+10%, +24% reported).

In Japan, there is formal central government control of prices by the Ministry of Health, Labour and Welfare (MHLW) and the pricing and reimbursement system has remained largely stable in the last few years. As expected, pharmaceuticals were subject to price reductions in April 2008. The long-term objective of the Japanese government is to raise generic volume share from 18.7% in 2007 to 30% by 2012; recent reforms have supported this goal by making substitution of a generic product for a branded product easier.

In 2008, the MHLW continued their push towards the acceptance of non-Japanese Asian data as part of the regulatory approval package for Japanese patients. Despite increasing budgetary pressures associated with an ageing population, they also publicly recognised the importance of the pharmaceutical industry and their own drive to reward innovation better in the future.

## OTHER ESTABLISHED REST OF WORLD

In Australia and New Zealand, we delivered a strong sales performance with sales up by 15% (+18% reported) to \$843 million (2007: \$715 million). Both our primary care and specialist care portfolios continued to grow, driven mainly by sales growth for *Crestor*, *Atacand* and *Nexium* in primary care and by *Seroquel* and *Arimidex* in specialist care. On a CER basis, these five brands, *Arimidex*, *Crestor*, *Seroquel*, *Atacand* and *Nexium*, grew by 33% (+37% reported).

### EMERGING REST OF WORLD

In the Emerging Rest of World regions, sales increased 16% (+20% reported) to \$4,273 million for the full year (2007: \$3,557 million), accounting for nearly 63% of total sales growth outside the US. Sales in Emerging Europe were up 10% (+18% reported) to \$1,215 million (2007: \$1,028 million). Sales in China increased 31% (+43% reported) to \$627 million (2007: \$437 million) and sales in Emerging Asia Pacific increased 10% (+7% reported) to \$802 million (2007: \$749 million).

As the pharmaceutical markets in Asia Pacific, Latin America and elsewhere develop, reforms in pricing and reimbursement will inevitably follow. As these markets become more important to our business, we have to consider carefully such factors when we develop brands. In many of the major markets, such as China, Brazil and Mexico, the patient pays directly for prescription medicines, and this will be an increasingly important issue for our business. Other growing markets, such as South Korea and Turkey are seeing more direct government intervention in pricing and reimbursement, more in line with the systems in Europe, Canada and Australia.

### EMERGING EUROPE

Russia continued to enjoy strong sales growth driven by *Symbicort*, *Merrem* and *Crestor* in 2008. Our business in Romania performed particularly well, almost doubling its size, primarily driven by *Seroquel*, *Nexium* and *Crestor*. Our continued expansion included the establishment of a local marketing presence in Ukraine and Kazakhstan.

### CHINA

In China, in line with our growth and expansion strategy of the past four years, we have continued to build our presence and sales (including Hong Kong) were up 31% (+43% reported) to \$627 million (2007: \$437 million). We are the largest multinational pharmaceutical company in the prescription market in China, as surveyed by the Hong Kong Association of the Pharmaceutical Industry, with a growth rate for prescription sales of 28.8% (+40.2% reported). Our investment in China increased with further growth in the number of sales representatives, and continued to support our innovation discovery research centre in Shanghai and our several external collaborations, including a new clinical pharmacology unit in Peking University and a translational science laboratory in Guangdong Province People's Hospital.

### EMERGING ASIA PACIFIC

In the rest of the Emerging Asia Pacific region, overall sales were up 10% (+7% reported) to \$802 million (2007: \$749 million) by achieving strong growth in India, Indonesia, Singapore, Thailand and Vietnam, where market dynamics continue to be positive.

### LATIN AMERICA

Latin America enjoyed strong sales performance up 18% (+22% reported) to \$1,159 million (2007: \$947 million), mainly driven by Mexico, Brazil, Venezuela, Central America and the Caribbean. As a result, our market share grew to 3% in the prescription market, improving our position from tenth to eighth in the prescription market ranking.

This reflects the investment made to develop our key products in fast-growing markets. *Atacand*, *Crestor*, *Nexium*, *Seroquel* and *Symbicort* all showed strong performance with overall sales up 33% (+38% reported) to \$516 million (2007: \$372 million). *Nexium* is our best selling prescription product in Latin America with overall sales up 25% (+28% reported) to \$185 million (2007: \$144 million) and the fifth best selling prescription product in the Latin American market. *Crestor* is now our second best selling prescription product with overall sales up 46% (+52% reported) to \$128 million (2007: \$84 million) and is the eleventh best selling prescription product in the Latin American market.

Our top three largest markets in the region are now Brazil, Mexico and Venezuela. Brazil sales were up 21% (+33% reported) to \$440 million (2007: \$330 million), Mexico sales were up 6% (+6% reported) to \$353 million (2007: \$334 million) and Venezuela sales were up 37% (+37% reported) to \$142 million (2007: \$103 million).

### MIDDLE EAST AND AFRICA

In 2008, the region again delivered a very strong double-digit growth, driven mainly by *Atacand*, *Crestor*, *Seroquel* and *Symbicort*, with particularly good performances in Gulf States, Levant, Egypt, South Africa and Maghreb. We have recently established a new marketing company in Israel as part of our investment plan in the region.

## THERAPY AREA REVIEW

## PIPELINE BY THERAPY AREA

CARDIOVASCULAR	GASTROINTESTINAL	INFECTION	NEUROSCIENCE	ONCOLOGY	RESPIRATORY & INFLAMMATION
▲ NO CHANGE	❖ ADDITION	✚ PROGRESSION	► NEW FILING		
AZD6482 ♦		AZD8931 ▲		Recentin ▲	
AZD4017 ♦		AZD7762 ▲	AZD0837 ▲	AZD6244 (ARRY-142896) <sup>1</sup> ▲	Atacand +
AZD2066 ▲		AZD8330 (ARRY-424704) <sup>1</sup> ▲	AZD1305 +	AZD2281 ▲	Seroquel +
AZD1386 ▲	AZD5904 ▲	AZD4769 ▲	AZD6370 +	AZD0530 ▲	Atacand Plus ►
MEDI-534 ▲	AZD3241 ▲	Pneumococcal vaccine <sup>1</sup> ▲	CAT-8015 ▲	AZD4877 +	Crestor ▲
MEDI-560 ▲	AZD2066 ▲	AZD3480 <sup>1</sup> ▲	AZD3355 ▲	AZD1152 +	Onglyza <sup>™1</sup> ▶
MEDI-566 ▲	AZD6280 ▲	AZD6765 ▲	CytoFab™ <sup>1</sup> ▲	AZD9056 ▲	Brilinta (AZD6140) ▲
AZD9639 (MEDI-564) <sup>1</sup> ▲	TC-5619 <sup>1</sup> ▲	CAM-3001 ▲	AZD8848 ♦	AZD5672 ▲	Crestor/Trilipix <sup>™1</sup> ▲
AZD8529 ♦	AZD8529 ♦	AZD1981 ▲	AZD8848 ♦	AZD1981 ▲	Dapagliflozin/ Metformin FDC <sup>1</sup> ▲
CMV vaccine ▲	AZD2516 ♦	AZD1386 +	AZD8566 ♦	AZD1386 +	Nexium ▲
MEDI-557 ▲	AZD1446 ♦	AZD8075 ♦	AZD9668 +	AZD1236 +	Motavizumab ▶
MEDI-559 ♦	AZD7268 ♦	AZD5985 ♦	AZD7325 +	AZD3199 +	PN-400 <sup>1</sup> ▲
			AZD7325 +	MEDI-563 +	Zactima ▲
				MEDI-545 +	Recentin ▲
					Recentin <sup>2</sup> ▲
					ZD4054 ▲
PHASE I		PHASE II		PHASE III/REGISTRATION	
LIFE-CYCLE MANAGEMENT					

<sup>1</sup> Partnered product.<sup>2</sup> Orphan indication.<sup>3</sup> Moved from NCE to Life-cycle management portfolio.

This section contains further information about the therapy areas on which our efforts are focused: Cardiovascular, Gastrointestinal, Infection, Neuroscience, Oncology, and Respiratory and Inflammation. We describe the business environment, trends and other factors that have influenced our decision to focus on diseases in these six areas, our strategic objectives for each and our progress towards achieving these objectives. We include information about our marketed medicines and how they are designed to make a meaningful difference for patients, together with an overview of performance during the year. We also report in detail on the potential new products and product life-cycle developments in our pipeline that reflect our commitment to maintaining a flow of innovation that adds value for our shareholders and society.

Detailed information about relevant continuing litigation can be found in Note 25 to the Financial Statements from page 144.

## SALES BY THERAPY AREA (\$ MILLION)

CARDIOVASCULAR			NEUROSCIENCE		
	GROWTH			GROWTH	
08	6,963	0%	08	5,837	+6%
07	6,686	+5%	07	5,340	+10%
06	6,118	+15%	06	4,704	+16%
GASTROINTESTINAL			ONCOLOGY		
	GROWTH			GROWTH	
08	6,344	-4%	08	4,954	-2%
07	6,443	-6%	07	4,819	+8%
06	6,631	+4%	06	4,262	+12%
INFECTION AND OTHER <sup>1</sup>			RESPIRATORY & INFLAMMATION		
	GROWTH			GROWTH	
08	2,451	+41%	08	4,128	+7%
07	1,714	+89%	07	3,711	+12%
06	875	+4%	06	3,151	+10%

<sup>1</sup> Includes Synagis and FluMist which were acquired in June 2007.

## 2008 IN BRIEF

- > **Crestor** sales up 26% to \$3.6 billion and **Crestor** is now approved in every EU country.
- > **Crestor** study demonstrates significant reduction in major cardiovascular events (44% compared to placebo in men and women with elevated hsCRP but low/normal cholesterol levels).
- > **Atacand** sales up 10% to \$1.5 billion.
- > Worldwide collaboration with Bristol-Myers Squibb to develop and commercialise dapagliflozin expanded to include Japan.
- > US submission for fixed dose combination of **Crestor** and Abbott's Trilipix™, for the treatment of mixed dyslipidaemia, anticipated for third quarter 2009.
- > **Toprol-XL** US sales down 70% for the full year.

## OUR MARKETED PRODUCTS

**Crestor**<sup>1</sup> (rosuvastatin calcium) is a statin for the treatment of dyslipidaemia and hypercholesterolemia, and to slow the progression of atherosclerosis.

**Atacand**<sup>2</sup> (candesartan cilexetil) is an angiotensin II antagonist for the first-line treatment of hypertension and symptomatic heart failure.

**Seloken/Toprol-XL** (metoprolol succinate) is a once daily tablet for 24-hour control of hypertension and for use in heart failure and angina.

**Tenormin** (atenolol) is a cardioselective beta-blocker for hypertension, angina pectoris and other cardiovascular disorders.

**Zestril**<sup>3</sup> (lisinopril dihydrate), an ACE inhibitor, is used for the treatment of a wide range of cardiovascular diseases, including hypertension.

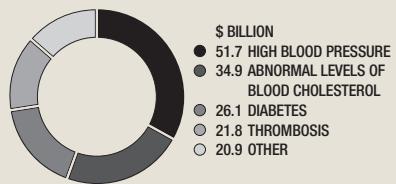
**Plendil** (felodipine) is a calcium antagonist for the treatment of hypertension and angina.

<sup>1</sup> Licensed from Shionogi & Co. Ltd.

<sup>2</sup> Licensed from Takeda Chemicals Industries Ltd.

<sup>3</sup> Licensed from Merck & Co., Inc.

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



CV is the single largest therapy area in the global healthcare market. World market value of \$155 billion. CV disease remains the greatest risk to life for most adults, accounting for 17 million deaths worldwide each year. In the US, 21 million people suffer from diabetes and two in five people with diabetes still have poor cholesterol control, one in three have poor blood pressure and one in five have poor glucose control.

## OUR STRATEGIC OBJECTIVE

Backed by over 40 years' experience, AstraZeneca is a world leader in cardiovascular (CV) medicines. We aim to build on our strong position, focusing on the growth areas of atherosclerosis (hardening of the arteries), thrombosis (blood clotting), diabetes and atrial fibrillation.

## HYPERTENSION, ATHEROSCLEROSIS AND DYSLIPIDAEMIA

High blood pressure (hypertension) and abnormal levels of blood cholesterol (dyslipidaemia) are well known to damage the arterial wall and thereby lead to atherosclerosis. CV events driven by atherosclerotic disease remain the leading cause of death in the western world. Lipid-modifying therapy, primarily statins, is a cornerstone of treating atherosclerotic risk. Within the lipid-modifying market, generics are taking a significant share of the market and it is anticipated that generic atorvastatin will be available late 2011. Recent studies of some competitor products created uncertainty about clinical efficacy leading to reduced sales of these products, whilst AstraZeneca's study (see below) provided positive data on the effect of rosuvastatin.

## OUR FOCUS

## Our key marketed products

Since its launch in 2003, our statin, **Crestor**, has continued to gain market share, based on its differentiated profile in managing cholesterol levels and its unique recent label indication for treating atherosclerotic disease. Following new approvals during 2008 in Germany, Spain, Poland, Norway and Malta, **Crestor** is now approved in every EU country.

Less than half of the people thought to have high levels of low-density lipoprotein cholesterol (LDL-C) 'bad cholesterol' get diagnosed and treated and of those people, only about half reach their physician's recommended cholesterol target using existing treatments. **Crestor** is the most effective statin in lowering LDL-C and the majority of patients reach their LDL-C goals using the usual 10mg starting dose. **Crestor** also produces an increase in high-density lipoprotein cholesterol (HDL-C) 'good cholesterol', across a range of doses. At its usual 10mg starting dose, **Crestor** has been shown, versus placebo, to reduce LDL-C by up to 52% and raise HDL-C by up to 14% with eight out of 10 patients reaching their lipid goals.

In the US, **Crestor** is also approved for use as an adjunct to diet for slowing the progression of atherosclerosis in patients with elevated cholesterol. **Crestor** is the only statin with an

atherosclerosis indication in the US which is not limited by disease severity or restricted to patients with coronary heart disease.

**Atacand**, first launched in 1997, is approved for the treatment of hypertension in over 100 countries and for symptomatic heart failure in over 70 countries. Angiotensin II antagonists are the fastest growing sector of the global hypertension market. Available as a once a day tablet, launches of the 32mg dosage strength outside the US continued during the year, and this dosage is now available in most Established Markets. In July 2008, we sought approval in Europe for two dose strengths of **Atacand Plus** (candesartan cilexetil/hydrochlorothiazide) which is a fixed combination of **Atacand** and the diuretic hydrochlorothiazide (HCTZ), indicated for the treatment of hypertension in patients who need more than monotherapy.

## Clinical trial developments

GALXY, our long-term global clinical research programme for **Crestor** investigating links between optimal lipid control, atherosclerosis and CV morbidity and mortality, has completed a number of studies involving over 69,000 patients in over 55 countries.

Data from the latest study, JUPITER, published in November 2008, demonstrated that **Crestor** 20mg significantly reduced major CV events (defined in this study as the combined risk of myocardial infarction, stroke, arterial revascularisation, hospitalisation for unstable angina, or death from CV causes) by 44% compared to placebo among men and women with elevated high-sensitivity C-reactive protein (hsCRP) (and other risk factors) but low to normal cholesterol levels. Results also showed that for patients taking **Crestor**, the combined risk of heart attack, stroke or CV death was reduced by nearly half, risk of heart attack was cut by more than half, risk of stroke was cut by nearly half and total mortality was significantly reduced by 20%. **Crestor** 20mg was well tolerated in nearly 9,000 patients during the course of the study. There was no difference between treatment groups for major adverse events, including cancer or myopathy. There was a small increase in physician reported diabetes consistent with data from other large placebo controlled statin trials.

GISSI-HF, an investigator sponsored study published in September 2008, evaluated **Crestor** 10mg and placebo in a heart failure population and confirmed the results of our CORONA study in showing no difference between the treatments in the primary endpoints of death or CV hospitalisation in patients with heart failure, over and above optimised heart failure treatment. Both studies

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
<i>Seloken/Toprol-XL</i>	807	(667)	36	1,438	(393)	36	1,795	(46)	(44)	(22)	(20)		
<i>Crestor</i>	3,597	714	87	2,796	673	95	2,028	26	29	33	38		
<i>Atacand</i>	1,471	123	61	1,287	99	78	1,110	10	14	9	16		
<i>Plendil</i>	268	(18)	15	271	(20)	16	275	(7)	(1)	(7)	(1)		
<i>Tenormin</i>	313	(17)	22	308	(24)	12	320	(6)	2	(8)	(4)		
<i>Zestril</i>	236	(72)	13	295	(30)	18	307	(24)	(20)	(10)	(4)		
Other	271	(34)	14	291	(14)	22	283	(12)	(7)	(5)	2		
<b>Total</b>	<b>6,963</b>	<b>29</b>	<b>248</b>	<b>6,686</b>	<b>291</b>	<b>277</b>	<b>6,118</b>	—	4	5	9		

were also consistent with the safety profile of *Crestor* in this vulnerable population. In both studies, outcome events appeared to be driven primarily by heart muscle failure rather than ischemic events where statins would be expected to have an effect.

Ongoing studies of *Crestor* include SATURN, which is designed to measure the impact of *Crestor* 40mg and atorvastatin (Lipitor™) 80mg on the progression of atherosclerosis in high-risk patients and is expected to report in 2011. AURORA, an outcomes study in patients with end stage renal disease is expected to present data by mid 2009.

The clinical programme (DIRECT) investigating the effect of *Atacand* (up to 32mg dosage) on retinopathy in hypertensive and normotensive diabetic patients completed in 2008 but failed to meet the primary endpoint. The results were published in September 2008.

#### In the pipeline

We continue the search for the next major therapy to reduce atherosclerotic risk. In collaboration with Abbott, we are developing a fixed dose combination of *Crestor* and Abbott's Trilipix™ and are anticipating a US submission in the third quarter of 2009.

The combination of *Crestor* (a statin) and Trilipix™ (a fibrate) is a potential new approach to helping patients with mixed dyslipidaemia achieve their treatment goals using a single capsule targeting all three major blood lipids: LDL-C, HDL-C, and triglycerides. Study results presented in 2008 showed that the combination of *Crestor* and Trilipix™ provides greater benefit across multiple lipid parameters than monotherapy, with significantly improved HDL-C and triglycerides compared to statin therapy alone, and significantly improved LDL-C compared to Trilipix™ alone.

We have stopped work on cholesterol absorption inhibitors because of failure to meet target product profiles.

#### DIABETES

The number of people affected by Type 2 diabetes continues to grow, driven by obesity in western markets. Type 2 diabetes is a chronic progressive disease and patients often require multiple medications to control their condition. There are a number of established oral generic and branded classes, such as sulfonylureas and thiazolidinediones (TZDs), however, newer classes, such as oral dipeptidyl peptidase-IV (DPP-IV) are entering the market successfully by offering effective blood sugar control and improved tolerability. Several new classes of drugs are in development in this area. The safety of anti-diabetic drugs continues to be an important focus of regulatory agencies and additional patient safety requirements for new medicines can be anticipated.

#### OUR FOCUS

In 2007, AstraZeneca and Bristol-Myers Squibb (BMS) announced the collaboration on a worldwide basis excluding Japan to develop and commercialise two compounds discovered by BMS (saxagliptin and dapagliflozin) being studied for the treatment of Type 2 diabetes. The development and commercial strategy for the two compounds is agreed jointly with BMS. In December 2008, AstraZeneca and BMS announced the extension of their collaboration to include dapagliflozin in Japan.

During 2008, AstraZeneca and BMS submitted a New Drug Application to the FDA and received the validation of a Marketing Authorisation Application to the European Medicines Agency for saxagliptin (Onglyza™). Onglyza™ was specifically designed to be a selective inhibitor with extended binding to the DPP-IV enzyme, with dual routes of clearance. Phase III data published during 2007 and 2008 showed improved glycaemic control when assessed as a monotherapy, as well as when assessed in combination with metformin, sulfonylureas and TZDs.

Dapagliflozin is a potential oral anti-diabetic belonging to the novel class of sodium-glucose cotransporter 2 (SGLT2) inhibitors. It is selective and designed to be used both as monotherapy and in combination with other therapies for Type 2 diabetes. Phase IIb data demonstrated that, when compared with a placebo, 12 weeks treatment with dapagliflozin improved blood glucose parameters, resulted in weight loss and was well tolerated in patients with Type 2 diabetes. An extensive Phase III programme is ongoing.

Our activities in the GKA (glucokinase activator) area continued during 2008, and clinical studies in Phase II are ongoing. The GKA mechanism of action induces insulin release from the pancreas and reduces glucose output from the liver, with marked blood glucose reducing effects in situations of hyperglycaemia.

We also progressed our AZD4017 (11-βHDS inhibitor) project into early clinical testing which aims to increase insulin sensitivity and thereby induce better glycaemic control with potential beneficial effects also on body weight and blood lipids.

We have stopped work on cannabinoid receptor 1 inhibitors because the tolerability profile of these inhibitors was considered unacceptable.

In July 2008, AstraZeneca and Columbia University Medical Center announced a strategic research collaboration to develop novel therapeutics for Type 2 diabetes and obesity. The research will focus on discovering mechanisms and identifying new biological targets for successful and commercially viable treatments for these diseases.

## ARRHYTHMIA AND THROMBOSIS

Atrial fibrillation (AF) is the most common cardiac arrhythmia. Rhythm-control therapy to control the symptoms of AF is dominated by generic amiodarone, which is effective at maintaining patients in normal heart rhythm, but very poorly tolerated. There remains an unmet need for a safe and tolerated therapy with effective symptom relief. Two competitor products are in late development for use in AF and recent data from an outcome study of one of them versus placebo in AF patients showed clinical benefit in addition to symptom relief – the first time for an anti-arrhythmic agent.

Patients surviving an acute coronary event are at increased risk from further thrombosis and treatment guidelines advocate anti-platelet therapy. New guidelines issued in 2007 by the European Society of Cardiology for the treatment of acute coronary syndrome (ACS), have highlighted the negative consequences of drug induced bleeding in conjunction with the treatment of ACS, reinforcing the need for new anti-thrombosis drugs with acceptable bleeding risk.

During the year, two new anti-coagulants (dabigatran and rivaroxaban) were approved in Europe for use in prevention of deep vein thrombosis in conjunction with orthopaedic surgery. No Phase III data are yet available for the ability of new anti-coagulants to prevent strokes in AF, the major chronic indication for anti-coagulants, without the risks and repeated monitoring of warfarin or other vitamin K antagonists.

### OUR FOCUS

#### In the pipeline

*Brilinta* (ticagrelor AZD6140), the first reversible, oral, adenosine diphosphate (ADP) receptor antagonist, is being developed to reduce the risk of blood clots and thrombotic events in patients diagnosed with ACS. Ticagrelor is currently being studied in the Phase III PLATO clinical trial, involving over 18,000 ACS patients in 43 countries, to determine if it is superior to clopidogrel for reducing the risk of thrombotic events in ACS patients.

The effectiveness of AZD0837 (an oral, direct thrombin inhibitor) in preventing strokes and other embolic events in AF patients will be studied in more than 35 countries, using a once-daily extended release formulation that provides sustained anti-coagulation effect throughout the dosing interval. We anticipate starting these Phase III studies in 2009.

Our lead compound in the treatment of AF is AZD1305, a combined ion channel blocker, which has progressed into Phase IIa testing in both the IV and oral form.

## FURTHER INFORMATION

In December 2007, we filed patent infringement actions against seven generic drug manufacturers in the US following receipt of notices of their intent to market generic copies of *Crestor* before the 2016 expiry of our licensed patent covering the active ingredient in *Crestor*. In July 2008, we filed a patent infringement action against Teva Pharmaceuticals in the US following receipt of its notice of its intent to market generic copies of *Crestor* before the 2016 expiry of our licensed patent covering the active ingredient in *Crestor*. These eight cases are proceeding as a consolidated action in US District Court, District of Delaware.

Also in the US, Teva Pharmaceuticals (Teva's Israeli parent company) filed a patent infringement lawsuit concerning *Crestor* on 6 October 2008. Teva alleges that *Crestor* tablets infringe a recently re-issued Teva US patent that claims stabilised pharmaceutical compounds.

AstraZeneca has full confidence in its *Crestor* product and the intellectual property protecting it, and will vigorously defend and enforce it.

Further information is set out in Note 25 to the Financial Statements on page 148.

## FINANCIAL PERFORMANCE 2008/2007

### PERFORMANCE 2008

#### Reported performance

CV sales were up 4% as reported to \$6,963 million (2007: \$6,686 million). Strong growth from *Crestor*, fuelled by the promotion of the atherosclerosis indication and increased sales of *Atacand* offset the continuing significant declines in *Seloken/Toprol-XL*.

#### Performance – CER growth rates

CV sales were unchanged from 2007 at CER. *Crestor* sales increased by 26% to \$3,597 million. US sales for *Crestor* for the full year increased by 18% to \$1,678 million. *Crestor* total prescription share in the US statin market increased to 9.9% in December 2008 from 8.6% in December 2007, and was the only branded statin to gain market share. *Crestor* sales in the Rest of World were up 34% for the full year to \$1,919 million, over half of global sales for the product. Sales were up 16% in Western Europe to \$836 million and 93% in Japan driving sales growth in the Established Markets and the Rest of World up 33% in total. Sales in Emerging Markets increased by 41%.

*Toprol-XL* and authorised generic sales of the drug in the US were down 70% for the full year to \$295 million. For the full year, *Seloken* sales in the Rest of World were up 1% to \$512 million.

US sales for *Atacand* for the full year increased 1% to \$262 million. Sales in other markets were up 12% to \$1,209 million, on a 10% increase in Established Markets and an 18% increase in Emerging Markets.

### PERFORMANCE 2007

#### Reported performance

CV sales rose by 9% from \$6,118 million in 2006 to \$6,686 million in 2007. Continued strong growth from *Crestor* more than offset the significant declines in *Seloken/Toprol-XL*.

#### Performance – CER growth rates

CV sales grew by 5% at CER. *Crestor* sales increased by 33% to \$2,796 million. In the US, *Crestor* sales for the full year were \$1,424 million, a 24% increase over 2006. Total prescriptions in the US statin market increased 8% for the year; *Crestor* prescriptions were up 22%. Sales outside the US for the full year increased 45% to \$1,372 million, nearly half the total worldwide sales for the product. Sales were up 26% in Western Europe with good growth in France and Italy. Sales in Canada increased 43%.

Global sales of *Seloken/Toprol-XL* fell by 22% to \$1,438 million. US sales of the *Toprol-XL* product range, which includes sales of the authorised generic were down 30% for the full year, as the full range of dosage strengths were subject to generic competition from August 2007. Sales of *Seloken* in other markets were up 5% for the full year as a result of growth in Emerging Markets.

*Atacand* sales in the US were unchanged for the full year whilst sales in other markets increased 12%.

Continued small declines were seen in *Zestril* (down 10% to \$295 million) and *Plendil* (down 7% to \$271 million), with general global falls compensated by increases in discrete markets.

# GASTROINTESTINAL

## 2008 IN BRIEF

- > Sales of *Nexium* \$5.2 billion, down 2%.
- > *Nexium* submissions in the EU for the short-term maintenance of haemostasis and prevention of re-bleeding in patients with peptic ulcer bleeding following therapeutic endoscopy and in the US for use in patients with peptic ulcer bleeding following therapeutic endoscopy.
- > In late 2008, a Complete Response Letter received from the FDA in connection with our *Nexium* submission for peptic ulcer bleeding.
- > *Losec/Prilosec* sales \$1.05 billion declining in the EU and US due to continuous generic pressure including the recent patent expiry in Italy. Overall sales down 14%; Japan sales still growing, up 5%.
- > Settlement of patent litigation in the US brought by AstraZeneca against Ranbaxy, with enforceability of disputed *Nexium* patents conceded and an agreement for licensed sales of generic *Nexium* from May 2014.
- > Other patent litigation continuing in the US against generic manufacturers following abbreviated new drug applications relating to *Nexium*.

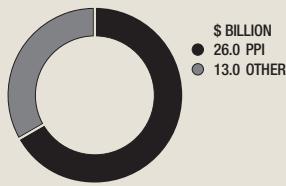
## OUR MARKETED PRODUCTS

**Nexium** (esomeprazole) is the first proton pump inhibitor (PPI) for the treatment of acid-related diseases to offer clinical improvements over other PPIs and other treatments.

**Losec/Prilosec** (omeprazole) is used for the short-term and long-term treatment of acid-related diseases.

**Entocort** (budesonide) is a locally acting corticosteroid for the treatment of inflammatory bowel disease (IBD).

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



The GI world market is valued at \$39 billion, with the proton pump inhibitor market accounting for \$26 billion. In the West (ie Europe and North America combined), according to different estimates, between 10% and 20% of adults suffer from GERD. The prevalence of GERD in Asia is lower but increasing. In spite of effective treatments with PPIs, around 40% of patients do not achieve full relief from symptoms.

## OUR STRATEGIC OBJECTIVE

We aim to maintain our strong position in gastrointestinal (GI) treatments by continuing to focus on PPIs. New *Nexium* line extensions include prevention of re-bleeding in patients with peptic ulcer bleeding, and prevention of low dose aspirin associated peptic ulcer. Our research and development is focused on finding new, innovative ways for treating acid reflux related disease.

### GASTRO-OESOPHAGEAL REFLUX DISEASE (GERD)

#### OUR FOCUS

##### Our key marketed products

*Nexium* is an effective, long-term therapy for patients with GERD. For the treatment of active peptic ulcer disease, seven-day *Nexium* triple therapy (in combination with two antibiotics for the eradication of *H.pylori*) heals most patients without the need for follow-up anti-secretory therapy. Since it was first launched in 2000, *Nexium* has been used in the treatment of acid-related diseases in over one billion patient treatments.

*Nexium* is available in approximately 100 countries for the treatment of acid-related diseases. In the US and EU, *Nexium* is also approved for the treatment of children aged 12 to 17 years with GERD and in 2008 was approved for use in these countries in children aged one to 11 years old. *Nexium* is also approved in the US, the EU, Canada and Australia for the treatment of patients with the rare gastric disorder, Zollinger-Ellison syndrome. In Europe, *Nexium* is approved for the healing and prevention of ulcers associated with non-steroidal anti-inflammatory drug (NSAID) therapy including Cox2 inhibitors. In the US, *Nexium* is approved for reducing the risk of gastric ulcers associated with continuous NSAID therapy in patients at risk of developing gastric ulcers.

*Nexium IV*, which is used when oral administration is not suitable for the treatment of GERD and upper GI side effects induced by NSAIDs, is approved in 86 countries including the US and all EU countries.

During 2008, we announced the submission of a supplemental new drug application (sNDA) to the FDA for *Nexium IV* (esomeprazole sodium) injection, seeking approval for use in patients with peptic ulcer bleeding following therapeutic endoscopy. This was followed by an EU submission for *Nexium IV* and tablets, seeking approval for the short-term maintenance of haemostasis and prevention of re-bleeding in patients with peptic ulcer bleeding following therapeutic endoscopy.

In late November 2008, we received the FDA Complete Response Letter regarding our *Nexium IV* sNDA for peptic ulcer bleed. The application has not received FDA approval in its present form. We are reviewing their comments and will respond in due course. The EU submission is still being reviewed by the European regulatory authorities.

Since its launch in 1988, we estimate that patients have benefited from over 900 million treatments with *Losec/Prilosec*. We continue to maintain patent property covering *Losec/Prilosec*. Further information about the status of omeprazole patents and patent litigation, including details of generic omeprazole launches, is set out in Note 25 to the Financial Statements on page 150.

*Entocort* has better tolerability than other corticosteroids in inflammatory bowel disease and greater efficacy than aminosalicylic acid medicines. It is prescribed as first-line therapy for both acute treatment and maintenance of clinical remission of mild to moderate, active Crohn's disease and is approved in more than 40 countries.

#### Clinical trial developments

Data from the *Nexium IV* Peptic Ulcer Bleed study (a multinational, randomised trial of 767 patients with peptic ulcer bleeding) is the basis for submissions in the US and EU referred to above. The study shows that use of *Nexium IV* for three days, followed by oral *Nexium* therapy for 27 days, was statistically more effective in reducing gastric ulcers compared to placebo after both three and 30 days.

#### In the pipeline

Our activities focus on reflux inhibitors and hypersensitivity therapy. Our lead compound, AZD3355, is undergoing clinical trials. Follow-up compounds are in Phase I testing.

Non-GERD related GI projects were successfully transferred to the spin-out company Albireo, in which AstraZeneca holds a large minority stake.

## FURTHER INFORMATION

In the US, we are continuing to pursue patent litigation against various generic manufacturers who have filed abbreviated new drug applications (ANDAs) and are seeking to market esomeprazole magnesium products before the expiration of certain of our patents relating to *Nexium*.

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
Nexium	5,200	(121)	105	5,216	(104)	138	5,182	(2)	–	(2)	1		
Losec/Prilosec	1,055	(156)	68	1,143	(277)	49	1,371	(14)	(8)	(20)	(17)		
Other	89	2	3	84	2	4	78	2	6	3	8		
<b>Total</b>	<b>6,344</b>	<b>(275)</b>	<b>176</b>	<b>6,443</b>	<b>(379)</b>	<b>191</b>	<b>6,631</b>	<b>(4)</b>	<b>(2)</b>	<b>(6)</b>	<b>(3)</b>		

On 15 April 2008, AstraZeneca announced it had settled its *Nexium* patent infringement litigation against Ranbaxy Pharmaceutical Industries and affiliates (Ranbaxy). As a consequence of the settlement, the patent litigation filed by AstraZeneca following Ranbaxy's submission to the FDA of an ANDA for a generic version of *Nexium* has been dismissed. Under the settlement Ranbaxy concedes that all six patents asserted by AstraZeneca in the patent litigation are valid and enforceable. Ranbaxy also accepts that four of the patents would be infringed by the unlicensed sale of Ranbaxy's proposed generic product. The settlement agreement allows Ranbaxy to commence sales of a generic version of *Nexium* under a licence from AstraZeneca from 27 May 2014, the expiry date of US Patent Numbers 5,877,192 and 6,875,872. We are co-operating fully with the Federal Trade Commission inquiry regarding this settlement.

AstraZeneca's *Nexium* patent infringement litigation against Teva/IVAX and Dr Reddy's Laboratories remains ongoing. No trial date has been set in either case.

During 2008, we received additional notices that patent challenges had been filed by generic drug manufacturers in respect of 20mg and 40mg delayed-release esomeprazole magnesium capsules. Details of these filings and of new and continuing litigation are set out in Note 25 to the Financial Statements on page 153.

The European Patent Office ruled in 2007 that the European process patent for *Nexium* and the European patent for the multiple unit pellet (MUPS) formulations of PPI, which expire in 2015, are valid in amended form following post-grant oppositions. These decisions are now subject to appeal proceedings.

Further, the European Patent Office granted a new European patent on 19 November 2008 for the MUPS formulations of esomeprazole and omeprazole, which expires in 2015.

We continue to have full confidence in our intellectual property protecting *Nexium* and will vigorously defend and enforce it.

The decision of the European Court of First Instance on our appeal against the European Commission's Decision in 2005 to impose fines on us totalling €60 million (\$75 million) for alleged infringements of European competition law relating to certain omeprazole intellectual property and regulatory rights is still pending. Further information about this case is set out in Note 25 to the Financial Statements on page 151.

In 2008 we filed complaints for patent infringement against two generic manufacturers (Barr Laboratories and Mylan Pharmaceuticals) in response to notices of ANDA submissions in respect of generic forms of *Entocort EC*.

### FINANCIAL PERFORMANCE 2008/2007

#### PERFORMANCE 2008

##### Reported performance

Sales for 2008 were down 2% on a reported basis to \$6,344 million from \$6,443 million in 2007.

##### Performance – CER growth rates

GI sales fell by 4% at CER. Global *Nexium* sales were down 2%, excluding the effects of exchange, to \$5,200 million from \$5,216 million the previous year. The decline was driven by the decrease in the US of 8% to \$3,101 million, however this was largely mitigated by sales in other markets increasing by 9% to \$2,099 million. In the US, dispensed retail tablet volumes increased by 2% and *Nexium* was the only major PPI brand to do so in 2008. In the Rest of World, growth in Canada (9%), Japan (5%) and Emerging Markets (20%) more than offset the 5% decline in Western European sales.

For the full year, sales of *Losec* fell 14% to \$1,055 million. *Prilosec* sales in the US were down 25% as a result of generic competition for the 40mg dosage form in the second half of the year. In the Rest of World, sales declined by 11%, despite increases in China (19%) and Japan (5%).

#### PERFORMANCE 2007

##### Reported performance

GI sales fell by 3% to \$6,443 million in 2007 from \$6,631 million in the previous year.

##### Performance – CER growth rates

GI sales fell by 6% at CER. Worldwide, *Nexium* sales fell by 2% to \$5,216 million. In the US, *Nexium* sales for the full year were \$3,383 million, down 4%. Estimated volume growth was 2% for the year. *Nexium* market share in the branded segment of the PPI market increased by 1.5 percentage points in 2007; however, generic omeprazole share of the prescription PPI market increased to 27.4% by December 2007, an increase of nearly 7 percentage points since December 2006. Realised prices declined by around 8% for the year. *Nexium* sales in other markets were up 2% for the full year to \$1,833 million, as growth in Emerging Markets more than offset the declines in Western Europe.

For the full year, *Losec* sales declined by 20% to \$1,143 million. *Prilosec* sales in the US were down 3% to \$226 million. *Losec* sales in other markets were down 24%, although sales increased in Japan and China; sales in these two markets accounted for almost 30% of the brand's performance.

# INFECTION

## 2008 IN BRIEF

- > **Merrem** sales of \$897 million, up 13%.
- > Strong reported growth for **Merrem** of 16% globally; 39% in the US.
- > **Synagis** sales of \$1.23 billion; in the US \$923 million.
- > Biologics Licence Application submitted for motavizumab, an improved anti-respiratory syncytial virus monoclonal antibody. A Complete Response Letter subsequently received from the FDA.
- > Market authorisation application submitted to European Medicines Agency for Live Attenuated Influenza Vaccine.

## OUR MARKETED PRODUCTS

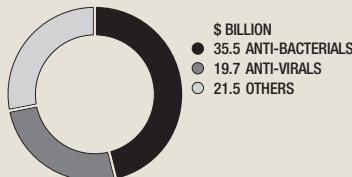
**Synagis** (palivizumab) is a humanised monoclonal antibody used for the prevention of serious lower respiratory tract disease caused by RSV in paediatric patients at high risk of acquiring RSV disease.

**Merrem/Meronem**<sup>1</sup> (meropenem) is a carbapenem anti-bacterial used for the treatment of serious infections in hospitalised patients.

**FluMist** (Influenza Virus Vaccine Live, Intranasal) is a live, attenuated, trivalent influenza virus vaccine licensed in the US for active immunisation of people two to 49 years of age against influenza disease caused by influenza virus subtypes A and type B contained in the vaccine.

<sup>1</sup> Licensed from Dainippon Sumitomo Pharma Co., Ltd.

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



The world Infection market is valued at \$77 billion, with anti-bacterials accounting for approximately 46% and anti-virals for 25%.

World demand for antibiotics remains high, due to escalating resistance and the increased risk of serious infections in both immuno-suppressed patients and ageing populations.

Approximately half of all infants are infected with RSV during the first year of life. Seasonal influenza results in three to five million cases of severe illness and up to half a million deaths globally each year.

## OUR STRATEGIC OBJECTIVE

We aim to build a leading franchise in the treatment of infectious diseases through continued commercialisation of the in-line brands such as **Synagis**, **Merrem** and **FluMist**, effective use of our structural and genomic-based discovery technologies and antibody platforms, and through continued research of novel approaches in areas of unmet medical need.

## RESISTANT BACTERIAL INFECTIONS

World demand for antibiotics remains high, due to escalating resistance and the increased risk of serious infections in both immuno-suppressed patients and ageing populations. Many bacterial infections currently have few satisfactory treatment options prompting demand for new and better therapies.

## OUR FOCUS

### Our key marketed products

**Merrem/Meronem** (meropenem) is a carbapenem antibiotic, which is active against most bacteria that cause serious infections in hospitalised patients. **Merrem** is the leading carbapenem and has a growing share of the intravenous antibiotic market because of its activity against bacteria resistant to many other agents. To meet the high and growing need for new and better therapies for resistant bacterial infections we have built an anti-bacterials discovery capability that places AstraZeneca among the industry leaders with the capability to create novel mechanism anti-bacterials.

## RESPIRATORY SYNCYTIAL VIRUS (RSV)

Approximately half of all infants are infected with RSV during the first year of life and nearly all children in the US have been infected by the time they reach their second birthday. Unlike other viral infections, there is no complete and durable immunity created by RSV, so repeated infection is likely and common. Premature babies (earlier than 36 weeks gestational age, especially those less than 32 weeks) or babies with chronic lung disease or congenital heart disease are at an even greater risk of contracting severe RSV disease than full-term babies.

## OUR FOCUS

### Our key marketed products

**Synagis** is used for the prevention of serious lower respiratory tract disease caused by RSV in children at high risk of the disease. It was the first monoclonal antibody (MAb) approved in the US for an infectious disease and since its launch in 1998 it has become the standard of care for RSV prevention. **Synagis** remains the only immunoprophylaxis in the marketplace

indicated for the prevention of RSV in paediatric patients at high risk of RSV. **Synagis** is administered by intra-muscular injection.

## In the pipeline

During 2008, we filed a biological licence application with the FDA for an improved anti-RSV MAb, motavizumab. We recently completed a Phase III study with motavizumab as a prophylaxis in infants with haemodynamically significant congenital heart disease. We are also conducting a Phase IIb study with motavizumab as a treatment for children hospitalised with severe RSV disease. In November 2008 we received a Complete Response Letter from the FDA asking for additional information on motavizumab which we are confident we can respond to and does not lead us to believe it is necessary to conduct further clinical trials.

In addition, three intranasal vaccines are being developed for the prevention of lower respiratory tract illness caused by RSV and parainfluenza virus-3 (PIV3): MEDI-559 (RSV), MEDI-560 (PIV3) and MEDI-534 (RSV-PIV3). We are conducting several Phase I and Phase I/II studies for these vaccines alone and in collaboration with the US National Institute of Allergy and Infectious Diseases under a Co-operative Research and Development Agreement.

## INFLUENZA VIRUS

Influenza is the most common vaccine-preventable disease in the developed world. According to World Health Organization estimates, seasonal influenza results in three to five million cases of severe illness and up to half a million deaths globally each year, primarily among the elderly. Rates of infection are highest among children, with school-aged children significantly contributing to the spread of the disease. Influenza also has socio-economic consequences related to both direct and indirect healthcare costs, including hospitalisations, work absence and loss of work productivity when either a caregiver or child is sick with influenza.

## OUR FOCUS

### Our key marketed products

**FluMist** is the first live, attenuated nasally delivered vaccine approved in the US for the prevention of disease caused by influenza A and B viruses in eligible children and adults, ages two to 49 years. In 2008, the US Centres for Disease Control and Prevention's Advisory Committee on Immunization Practices voted to expand recommendations for routine seasonal influenza vaccination to include all school-age children up to the age of 18 years as soon as feasible but no later than the 2009/2010 influenza season. During the year,

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
<i>Merrem</i>	897	97	27	773	121	48	604	13	16	20	28		
<i>Synagis</i> <sup>1</sup>	1,230	612	–	618	618	–	–	n/m	n/m	n/m	n/m		
<i>FluMist</i> <sup>1</sup>	104	51	–	53	53	–	–	n/m	n/m	n/m	n/m		
Other	220	(54)	4	270	(12)	11	271	(20)	(19)	(4)	–		
<b>Total</b>	<b>2,451</b>	<b>706</b>	<b>31</b>	<b>1,714</b>	<b>780</b>	<b>59</b>	<b>875</b>	<b>41</b>	<b>43</b>	<b>89</b>	<b>96</b>		

<sup>1</sup> Acquired in June 2007.

we began rolling out the international marketing plan for our nasal spray influenza vaccine. The first milestone was the filing of a market authorisation application to the European Medicines Agency in late 2008.

### HEPATITIS C VIRUS (HCV)

HCV infects an estimated 170 million people worldwide and the current market for HCV therapy exceeds \$2 billion annually. However, therapy for the strains that predominate in the US and Western Europe require 12 months' treatment and produces a durable cure in only 50% of patients. Key opinion leaders expect the current standard of treatment (interferon plus ribavirin) to change to a form of combination therapy involving one or more new mechanism of action direct-acting anti-virals and there are several small and large pharmaceutical companies with varying HCV pipelines focused on such therapies. A future paradigm of combinations of anti-virals as standard care offers the opportunity for several new therapies to be widely used.

### OUR FOCUS

#### In the pipeline

Projects in development include AZD7295, a novel HCV compound, currently in Phase II.

### SEPSIS

Sepsis is a life-threatening condition resulting from uncontrolled severe infections, which affects an estimated three million people a year worldwide. Few industry pipelines are focused on the development of products specifically for registration for the treatment of sepsis or septic shock.

### OUR FOCUS

#### In the pipeline

The development programme for CytoFab™, our potential treatment for severe sepsis licensed from Protherics, continues in Phase II development. CytoFab™ has the potential to be one of a limited number of medicines specifically developed for such patients.

### TUBERCULOSIS (TB)

TB remains a worldwide threat and is newly diagnosed in over eight million people worldwide every year. It is one of the greatest causes of death from infectious disease in the developing world.

### OUR FOCUS

As part of our commitment to making a contribution to improving health in the developing world, we are working to find a new, improved treatment for TB. We have a dedicated research facility in Bangalore, India that is focused on finding a treatment for TB that will act on drug-resistant strains, simplify the treatment regime (current regimes are complex and lengthy, meaning many patients give up before the infection is fully treated) and be compatible with HIV/AIDS therapies (TB and HIV/AIDS form a lethal combination, each speeding the other's progress). Over 80 scientists in Bangalore work closely with our infection research centre in Boston, US as well as with academic leaders in the field, and they have full access to all AstraZeneca's platform technologies, such as high throughput screening and compound libraries. It is a complex area of research, but we hope to have identified a candidate drug for testing in man within the next two to three years.

### FINANCIAL PERFORMANCE 2008/2007

#### PERFORMANCE 2008

##### Reported performance

Total Infection sales increased on a reported basis by 43% to \$2,451 million as a full year of *Synagis* and *FluMist* sales were taken in the Group for the first time, and *Merrem* sales enjoyed another year of good growth.

##### Performance – CER growth rates

Infection sales were up 41% at CER. For the full year, *Synagis* sales were \$1,230 million. Sales in 2007 were \$618 million, but this only reflected sales since the acquisition of MedImmune in June 2007. Worldwide sales of *Synagis* in the fourth quarter were \$506 million, a 5% increase over the same period in 2007 when the product was included in sales.

*FluMist* sales were \$104 million for the full year. In contrast to 2008, all of 2007 *FluMist* sales of \$53 million were realised in the fourth quarter as a result of the timing of regulatory approvals for the new formulation and expanded label.

### PERFORMANCE 2007

#### Reported performance

Infection sales grew by 96% to \$1,714 million from \$875 million in 2006, driven by the inclusion of seven months of *Synagis* and *FluMist* sales and an increase in *Merrem* sales of 28%.

##### Performance – CER growth rates

Infection sales grew by 89%, after excluding the effect of exchange. CER growth of 20% from *Merrem*, with sales of \$773 million, and the inclusion of *Synagis* and *FluMist* were the principal drivers of this growth. Sales of *Synagis* totalled \$618 million for the period post-acquisition of MedImmune, with \$480 million arising in the fourth quarter. *Synagis* sales are highly seasonal, with the majority of sales recorded in the fourth and first quarters.

Sales of *FluMist* were \$53 million for the full year, all of which were recorded in the fourth quarter. As with *Synagis*, there were no corresponding sales in the prior year period.

Sales of *Merrem* increased by 20% to \$773 million, with strong growth in the US (sales up 32% to \$149 million) and Western Europe (sales up 20% to \$307 million).

# NEUROSCIENCE

## 2008 IN BRIEF

- > *Seroquel* sales up 9% to over \$4.45 billion.
- > *Seroquel XR* approved in the US for acute bipolar depression, acute bipolar mania and bipolar maintenance.
- > *Seroquel XR* approved under the European Mutual Recognition Procedure for the treatment of acute bipolar depression and acute bipolar mania in October. *Seroquel* also approved at the same time for the treatment of acute bipolar depression.
- > FDA Complete Response Letter received on *Seroquel XR* for Major Depressive Disorder in December.
- > Regulatory submissions made for *Seroquel XR* for the treatment of Major Depressive Disorder and for Generalised Anxiety Disorder in both the US and EU.
- > Summary Judgment Motion granted to AstraZeneca in the patent infringement actions commenced against two generic drug manufacturers in the US following abbreviated new drug applications relating to *Seroquel*.
- > Separate lawsuits filed in the US against third party manufacturers relating to infringement of the *Seroquel XR* patents.
- > Personal injury actions in the US and Canada involving *Seroquel* being defended vigorously.

## OUR MARKETED PRODUCTS

**Seroquel** (quetiapine fumarate) is an atypical anti-psychotic drug approved for the treatment of adult schizophrenia and bipolar disorder (mania, depression and maintenance).

**Zomig** (zolmitriptan) is for the treatment of migraine with or without aura.

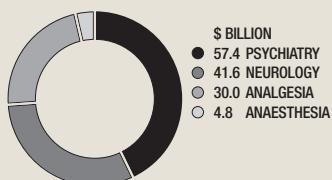
**Diprivan** (propofol) is an intravenous general anaesthetic used in the induction and maintenance of anaesthesia, light sedation for diagnostic procedures and for intensive care sedation.

**Naropin** (ropivacaine) is a long-acting local anaesthetic, replacing the previous standard treatment of bupivacaine.

**Xylocaine** (lidocaine) is a widely used short-acting local anaesthetic.

**EMLA** (lidocaine + prilocaine) is a local anaesthetic for topical application.

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



The Neuroscience world market totals \$134 billion. The medical need in Neuroscience is significant. Depression and anxiety disorders remain under-diagnosed and under-treated, with 15% of the population suffering from major depression at least once in their lives. Schizophrenia affects around 1% of the adult population, and 17 million people suffer from bipolar disorder across the major markets. Chronic pain affects over 20% of the population and pain management is the most common reason for seeking medical care. Alzheimer's disease affects approximately 24 million people worldwide (predicted to reach 40 million by 2020). Current therapy does not significantly change the course of this progressive neuro-degenerative disorder.

## OUR STRATEGIC OBJECTIVE

We aim to strengthen our position in neuroscience through further growth of *Seroquel* and *Seroquel XR* and by the successful introduction of a range of new medicines aimed at significant medical need in psychiatry, analgesia (pain control) and cognition (including Alzheimer's disease and cognitive disorders in schizophrenia).

## PSYCHIATRY

Most branded schizophrenia products will face generic competition in the period 2012 to 2015, with all current atypical anti-psychotic patents expiring by 2018. Future demand will be for products with significantly improved efficacy and tolerability.

The depression and anxiety markets are currently dominated by generic selective serotonin re-uptake inhibitors and serotonin norepinephrine re-uptake inhibitors. As growth in the US slows, the Japanese market continues to grow. Generic growth is anticipated over the next five years as patents expire.

## OUR FOCUS

### Our key marketed products

*Seroquel* is a leading atypical anti-psychotic treatment for adult schizophrenia and bipolar disorder. *Seroquel* remains the most commonly prescribed atypical anti-psychotic in the US, where it is the only atypical anti-psychotic approved as monotherapy treatment for both bipolar depression and bipolar mania as well as the leading atypical brand globally by sales value. Its clinical development programme was substantially completed during 2008 resulting in worldwide launches of *Seroquel XR* for schizophrenia. We have also made the associated regulatory submissions and data presentations in bipolar disorder, major depressive disorder (MDD) and generalised anxiety disorder (GAD).

First launched in 1997, *Seroquel* is now approved in 92 countries. *Seroquel XR*, an extended release formulation that offers patients and doctors a once-daily treatment, was launched in the US for the treatment of schizophrenia in 2007 and is now approved in 45 countries for schizophrenia, 12 countries for bipolar mania, seven countries for bipolar depression and four countries, including the US, for bipolar maintenance, in one market for MDD, and in one market for GAD.

In 2008, the FDA approved *Seroquel XR* for the treatment of depressive episodes associated with bipolar disorder, the manic and mixed episodes associated with bipolar 1 disorder and both *Seroquel* and *Seroquel XR* for the maintenance treatment of bipolar 1 disorder as adjunctive therapy to lithium or divalproex. In addition, *Seroquel XR* and *Seroquel* were approved in the EU for the treatment of major depressive episodes in bipolar disorder. *Seroquel XR* was also licensed in the EU for moderate to severe manic episodes in bipolar disorder.

During 2008, regulatory submissions were made in both the US and in the EU for GAD and for MDD. AstraZeneca received a Complete Response Letter from the FDA for its sNDA for *Seroquel XR* for the treatment of MDD in adult patients. AstraZeneca is continuing discussions with the FDA. A separate regulatory submission was made to the FDA for the treatment of schizophrenia in adolescents (13 to 17 year olds) and for the treatment of acute manic episodes in children and adolescents (10 to 17 year olds) with bipolar 1 disorder. The US prescribing information for *Seroquel* and *Seroquel XR* is being updated to include new safety information regarding use in children and adolescents. *Seroquel* and *Seroquel XR* are not approved currently for use in paediatric patients under 18 years of age.

In January 2009, the FDA granted an additional six-month period of market exclusivity to *Seroquel* for its licensed indications, based on studies we conducted in adolescents with schizophrenia and children and adolescents with bipolar mania. The *Seroquel* patent expires in September 2011. The allowed six-month paediatric exclusivity period, which takes effect upon expiration of the patent, will extend the exclusivity of *Seroquel* to March 2012.

## In the pipeline

We have progressed AZD8529 into Phase I and AZD2624 into Phase II for the treatment of schizophrenia, with AZD2327 entering Phase IIa and AZD6765 and AZD7325 entering into Phase IIb clinical development for the treatment of anxiety and/or depression.

We also continued to build our alliance/partnership network in 2008 by entering into a collaboration with the Columbia University Medical Center to examine further the relevance of adult neurogenesis in anti-depressant action and novel approaches to treat depression and anxiety.

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
<i>Seroquel</i>	4,452	346	79	4,027	526	85	3,416	9	11	15	18		
<i>Diprivan</i>	278	(3)	18	263	(53)	12	304	(1)	6	(17)	(13)		
<i>Zomig</i>	448	(3)	17	434	18	18	398	(1)	3	5	9		
Local anaesthetics	605	13	35	557	(6)	34	529	2	9	(1)	5		
Other	54	(7)	2	59	(1)	3	57	(12)	(8)	(2)	4		
<b>Total</b>	<b>5,837</b>	<b>346</b>	<b>151</b>	<b>5,340</b>	<b>484</b>	<b>152</b>	<b>4,704</b>	<b>6</b>	<b>9</b>	<b>10</b>	<b>14</b>		

## ANALGESIA AND ANAESTHESIA (PAIN CONTROL)

Significant unmet need remains for efficacy and tolerability in the neuropathic pain market. Several novel compounds are in development but recent disappointments highlight continuing uncertainty regarding market approval.

The osteoarthritis (OA) market is steadily growing, due to ageing populations and novel agents entering the market. However, the established use of generic treatment makes market entry more difficult. Biologics are an emerging treatment option for OA.

### OUR FOCUS

#### Our key marketed products

*Zomig* Nasal Spray was approved for the acute treatment of cluster headache in 14 member states in the EU in 2008.

*Diprivan* is the world's best-selling intravenous general anaesthetic. A complete change over to *Diprivan* EDTA, a microbial-resistant formulation, is expected in 2009, following the approval of this formulation in the last major territory (UK) in 2008.

*Naropin* approvals continue for extended use in paediatric patients to include neonates and infants aged below one year old.

*EMLA* submissions/approvals of patch presentation have continued, particularly in Eastern European countries. In Japan, *EMLA* is out-licensed to SATO who expect to file their Japanese NDA in July 2009.

### In the pipeline

PN400 is a fixed-dose combination tablet of enteric-coated naproxen and immediate release esomeprazole which uses proprietary technology licensed from POZEN Inc. through a collaboration established in August 2006. It is being developed for the relief of signs and symptoms of OA, rheumatoid arthritis and ankylosing spondylitis in patients at risk for developing non-steroidal anti-inflammatory drug (NSAID)-associated gastric ulcers. Approximately half of the 121 million chronic arthritis patients in the US and the five largest European countries are at risk of developing NSAID-associated ulcers based on their age, prior history of ulceration, or use of low dose aspirin. The Phase III trial programme, which was initiated in the third quarter of 2007, has now completed enrolment. The two Phase III ulcer risk reduction studies, comparing PN400 against enteric-coated naproxen 500mg in subjects with chronic pain and who are at risk for NSAID-associated ulcers, achieved their primary endpoints. Subjects taking PN400 experienced statistically significantly fewer endoscopically confirmed gastric ulcers than those taking naproxen. Two additional Phase III studies are still ongoing. Upon completion of the entire PN400 Phase III clinical programme, AstraZeneca will make a final determination regarding regulatory filing. A regulatory submission for PN400 in the US is currently planned for mid 2009.

We progressed three other early development compounds during the year: AZD2516 into Phase I clinical development and AZD1386 and AZD1940 in Phase II clinical development for the treatment of nociceptive (caused by tissue damage) and/or neuropathic (caused by nerve damage) pain.

## COGNITION

Alzheimer's disease remains one of the largest areas of unmet need and also one of high risk for neuroscience product development, due in part to the challenges of establishing efficacy in clinical trials. Current treatments, which physicians consider inadequate, target the symptoms not the underlying cause of the disease. Achieving disease modification is very difficult evidenced by recent late stage product development failures. Growth in this area is strong (20% to 40% across the world) but all existing agents will face patent expiry by 2013.

There are currently no products approved to treat cognitive dysfunction associated with schizophrenia. The first product to market will face the challenge of disease education and the establishment of treatment guidelines.

### OUR FOCUS

#### In the pipeline

We have expanded the portfolio of potential medicines in this area to five development programmes, of which three are in clinical evaluation, in Alzheimer's disease, cognitive disorders in schizophrenia (CDS) and other cognition disorders. In addition to developing molecules for cognitive disorders, we continue to progress two development phase molecules for the treatment of other neurodegenerative diseases.

Through our collaboration with, amongst others, the Karolinska Institute in Sweden, our research capabilities in positron emission tomography, which provides early signalling of potential efficacy for our Alzheimer's compounds, continue to progress. We now have two C-11 diagnostic compounds and one F-18 compound in development.

Compounds in clinical evaluation include products deriving from our relationship with Targacept (AZD3480, TC-5619 and AZD1446).

AZD3480, a neuronal nicotinic receptor agent, is currently in Phase IIb clinical testing in Alzheimer's disease and TC-5619 is in Phase II clinical testing for CDS. AZD3480 did not meet the Phase IIb trial primary endpoint for CDS and is not expected to progress to Phase III studies in this indication. AstraZeneca and Targacept previously announced top-line results from a Phase IIb study of AZD3480 in mild to moderate Alzheimer's disease and are currently evaluating AZD3480 in a Phase II exploratory study in attention deficit/hyperactivity disorder (ADHD) in adults. A decision by AstraZeneca with respect to potential further development of AZD3480 in Alzheimer's disease or ADHD is now expected in the first half of 2009, pending completion of the adult ADHD study and other ongoing evaluations.

#### FURTHER INFORMATION

AstraZeneca is defending approximately 9,210 served or answered lawsuits involving approximately 15,461 plaintiff groups who have filed Seroquel-related product liability claims in the US and Canada. Although the nature of the alleged injuries is not clear from the face of most of the complaints and discovery of the cases is continuing, plaintiffs generally contend that they developed diabetes and/or other related injuries as a result of taking Seroquel and/or other atypical anti-psychotic medications. Further information can be found in Note 25 to the Financial Statements on page 155. Trials of these cases are expected to commence in 2009.

In July 2008 AstraZeneca was granted a Summary Judgment Motion from the US District Court for the District of New Jersey in the ongoing patent infringement action against Teva Pharmaceuticals USA Inc and Sandoz, Inc. Teva and Sandoz have filed appeals.

Separate lawsuits have been filed in the US against third party manufacturers relating to infringement of the Seroquel XR patents.

We continue to have full confidence in our intellectual property protecting Seroquel and will vigorously defend and enforce it. Details of the litigation against generic drug manufacturers in respect of Seroquel are set out in Note 25 to the Financial Statements on page 155.

#### FINANCIAL PERFORMANCE 2008/2007

##### PERFORMANCE 2008

###### Reported performance

Neuroscience sales grew by 9% to \$5,837 million in 2008 from \$5,340 million in 2007. All geographic areas experienced growth and Seroquel grew strongly by 11%.

###### Performance – CER growth rates

Sales in the Neuroscience therapy area grew by 6% to \$5,837 million from \$5,340 million last year.

US sales for Seroquel for the full year were \$3,015 million, 5% ahead of last year.

Seroquel remains the market leader in the US anti-psychotic market, with a total prescription share of 31.6% in December 2008.

For the full year, Seroquel sales in the Rest of World increased by 17% to \$1,437 million, with value and volume growth well ahead of the market in all regions.

Sales of Zomig for the full year were up 6% in the US to \$187 million. Sales in the Rest of World were down 5% to \$261 million.

##### PERFORMANCE 2007

###### Reported performance

Sales in the Neuroscience therapy area rose by 14% in 2007, up to \$5,340 million from \$4,704 million in 2006. Seroquel was the principal driver of performance, recording an 18% increase in sales.

###### Performance – CER growth rates

Neuroscience sales grew by 10% at CER. Annual Seroquel sales exceeded \$4 billion for the first time in 2007. Full year sales were \$4,027 million, up 15% over last year. In the US, Seroquel sales increased by 15% to \$2,863 million. Seroquel sales in other markets were up 16% for the full year, as a result of market share gain in most markets.

Zomig sales for the full year increased 5% in the US (to \$177 million) and 4% in other markets, totalling \$434 million.

## 2008 IN BRIEF

- > **Arimidex** sales up 4% to \$1.86 billion and is the leading branded hormonal breast cancer therapy in the US, Japan and France.
- > **Casodex** sales \$1.26 billion, down 12%. Expiry of EU marketing exclusivity in 2008.
- > **Zoladex** sales \$1.14 billion, down 3%.
- > Results from three Phase III *Zactima* trials in non-small cell lung cancer (NSCLC) showed that *Zactima*, in combination with standard chemotherapy, brings clinical benefits to patients with previously treated NSCLC.
- > Results from the *Iressa* Phase III INTEREST study underpin a marketing authorisation application in the EU and the pan-Asian IPASS study met its primary objective showing superior progression-free survival for *Iressa* compared with two chemotherapies in clinically selected patients.
- > **ZD4054** progressed into Phase III development for hormone-resistant prostate cancer.
- > Registration trials ongoing of *Recentin* in first line colorectal cancer and recurrent glioblastoma multiforme.

## OUR MARKETED PRODUCTS

**Arimidex** (anastrozole) is an aromatase inhibitor for the treatment of breast cancer.

**Casodex** (bicalutamide) is an anti-androgen therapy for the treatment of prostate cancer.

**Zoladex** (goserelin acetate implant), in one- and three-month depots, is an LHRH agonist for the treatment of prostate cancer, breast cancer and certain benign gynaecological disorders.

**Iressa** (gefitinib) is an EGFR-TKI that acts to block signals for cancer cell growth and survival in non-small cell lung cancer.

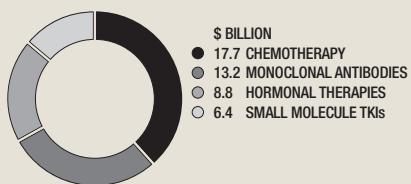
**Faslodex** (fulvestrant) is an injectable oestrogen receptor antagonist for the treatment of breast cancer, with no known agonist effects, that down-regulates the oestrogen receptor.

**Nolvadex** (tamoxifen citrate) remains a widely prescribed breast cancer treatment outside the US.

**Ethyol** (amifostine) is used to help prevent certain side effects of specific types of chemotherapy and radiotherapy that are used to treat head and neck and ovarian cancer.

**Abraxane**® (paclitaxel protein-bound particles for injectable suspension) (albumin-bound) for the treatment of breast cancer<sup>1</sup>.

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



The world market value for cancer therapies is \$46 billion and is growing strongly.

An increasing number of large pharmaceutical companies as well as biotechs have a stated ambition to build their business in oncology. In the last several years there has been a substantial increase of clinical trial activity across all the major tumours and sub-types increasing pressure on innovator companies to deliver best in class or first in class therapies. According to IMS, value growth in oncology will continue at double digit compound annual growth rates. This is well above growth rates for other therapy areas which makes oncology, despite market pressures, an attractive area for investment.

## OUR STRATEGIC OBJECTIVE

We aim to build on our position as a world leader in cancer treatment through continued growth of *Arimidex*, further launches and line extensions of newer products, such as *Faslodex*, and the successful introduction of novel therapeutic approaches currently in development, including both small molecule and biological drugs, targeted at high unmet need.

## CANCER

## OUR FOCUS

## Our key marketed products

During 2008, our breast cancer treatment, *Arimidex* maintained its position as market leader in sales of branded hormonal agents, with approximately four million patient years of clinical experience. This success is largely based on the extensive long-term efficacy and safety results of the ATAC study, which showed *Arimidex* to be significantly superior to tamoxifen at preventing breast cancer recurrence during and beyond the five-year treatment course. (Breast cancer recurrence is defined as loco-regional recurrence, distant recurrence or contra-lateral breast cancer).

*Arimidex* continues to be the leading branded hormonal therapy for new patients in the US, Japan and France, and is also approved in a number of markets in Europe for a switch indication for patients who have already received two to three years of tamoxifen.

*Faslodex*, now approved in more than 60 markets, offers an additional hormonal therapy for patients with hormone-sensitive, advanced breast cancer, delaying the need for cytotoxic chemotherapy. It is a once-monthly injection approved for the second-line treatment of hormone-receptor positive, advanced breast cancer in post-menopausal women.

*Casodex* is used as a 50mg tablet for the treatment of advanced prostate cancer, and as a 150mg tablet for the treatment of locally advanced prostate cancer. European sales declined due to generic erosion following patent and/or marketing exclusivity expiries in July 2008. Sales growth continued in Japan, where *Casodex* is available as an 80mg tablet and is approved for all stages of prostate cancer. In the US, the FDA granted an additional six months' paediatric extension providing marketing exclusivity in the US to April 2009.

*Zoladex* is approved in 120 countries. It is approved for the treatment of prostate cancer, breast cancer and gynaecological disorders. In non-metastatic prostate cancer, *Zoladex* is the only luteinising hormone-releasing hormone (LHRH) agonist shown to improve overall survival both when used in addition to radical prostatectomy and when used in addition to radiotherapy. The 10-year follow-up results of a study for the European Organisation for Research and Treatment of Cancer confirmed the long-term survival benefits of *Zoladex* when used as adjuvant to radiotherapy in patients with locally advanced prostate cancer.

In breast cancer, *Zoladex* is widely approved for use in advanced breast cancer in pre-menopausal women. In a number of countries, *Zoladex* is also approved for the adjuvant treatment of early stage pre-menopausal breast cancer as an alternative to and/or in addition to chemotherapy. *Zoladex* offers proven survival benefits for breast cancer patients with a favourable tolerability profile.

Competition in the LHRH agonist market is expected to increase in Europe during 2009, with the anticipated launches of generic goserelin. This follows the announcement of the approval of generic goserelin (one-month depot) in Germany in December.

*Iressa* is approved in 36 countries and is the leading epidermal growth factor receptor-tyrosine kinase inhibitor (EGFR-TKI) in the Asia Pacific region where it continues to be marketed for pre-treated advanced NSCLC. Based on data from the Phase III INTEREST study comparing *Iressa* with docetaxel, a marketing authorisation application for *Iressa* has been submitted to the European Medicines Agency.

Outside the US, we have various distribution and marketing arrangements for branded *Ethyol*. As of June 2008, our two main distribution partners are Pinnacle Biologics for Western Europe, Turkey and Israel, and Schering-Plough International for Rest of World.

## Clinical trial developments

Results from the Phase III pan-Asian IPASS study evaluating the efficacy of *Iressa* as first-line treatment of NSCLC, were also announced. The IPASS study exceeded its primary objective, demonstrating superior

<sup>1</sup> In November 2008, we entered into an agreement with Abraxis under which Abraxis re-acquired exclusive rights to market Abraxane® in the US.

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
Casodex	1,258	(161)	84	1,335	74	55	1,206	(12)	(6)	6	11		
Arimidex	1,857	69	58	1,730	151	71	1,508	4	7	10	15		
Zoladex	1,138	(31)	65	1,104	39	57	1,008	(3)	3	4	10		
Iressa	265	8	19	238	(1)	2	237	3	11	–	–		
Faslodex	249	25	10	214	18	10	186	12	16	10	15		
Nolvadex	85	(5)	7	83	(8)	2	89	(6)	2	(9)	(7)		
Abraxane®	64	2	–	62	44	–	18	3	3	244	244		
Ethyol	28	(15)	–	43	43	–	–	n/m	n/m	n/m	n/m		
Other	10	(1)	1	10	(1)	1	10	(10)	–	(10)	–		
<b>Total</b>	<b>4,954</b>	<b>(109)</b>	<b>244</b>	<b>4,819</b>	<b>359</b>	<b>198</b>	<b>4,262</b>	<b>(2)</b>	<b>3</b>	<b>8</b>	<b>13</b>		

progression-free survival (PFS) for *Iressa* compared with two chemotherapies (carboplatin/paclitaxel) in clinically selected patients. AstraZeneca is consulting with relevant health authorities regarding the IPASS data. Further Phase II trials are continuing to evaluate the potential benefits of *Iressa* in NSCLC and other EGF receptor-driven tumours.

#### In the pipeline

*Zactima* (vandetanib) is a potential new oral anti-cancer therapy, which has a unique anti-cancer profile through two clinically proven mechanisms. It blocks the development of a tumour's blood supply (anti-angiogenesis) and blocks the growth and survival of the tumour itself (anti-EGFR). *Zactima* also inhibits RET-kinase activity, an important growth driver in certain types of thyroid cancer.

During 2008, we announced results from two Phase III clinical studies of *Zactima* in combination with chemotherapy agents, docetaxel (ZODIAC) and pemetrexed (ZEAL), and one monotherapy clinical study (ZEST) in pre-treated advanced NSCLC. The observed safety profile in these three Phase III studies was consistent with previous studies with *Zactima* in NSCLC.

Results from the ZODIAC and ZEAL studies showed advantages for *Zactima* in combination with standard chemotherapy, compared to chemotherapy alone. The addition of *Zactima* to chemotherapy prolonged PFS, the primary endpoint, which achieved statistical significance in the ZODIAC study, but not in the smaller ZEAL study. Clinical benefits were seen in secondary endpoints. Both studies showed that adding *Zactima* to chemotherapy significantly improved objective response rate, which is a measurement of tumour shrinkage. Additionally, positive trends in prolonging

overall survival (OS) were seen, although these did not reach statistical significance and the data are still immature. Importantly, the studies also showed that adding *Zactima* to chemotherapy controlled the symptoms of lung cancer better than chemotherapy alone, allowing patients to maintain their quality of life for significantly longer.

ZEST, which evaluated the efficacy of *Zactima* monotherapy versus erlotinib, did not meet the primary objective of demonstrating a statistically significant prolongation of PFS for *Zactima*. However, *Zactima* and erlotinib showed equivalent efficacy for PFS and OS in a pre-planned non-inferiority analysis. We plan to file a regulatory submission in the second quarter of 2009 following discussion with regulatory agencies for combination therapy. Full results from studies ZODIAC, ZEAL and ZEST will be presented at an international medical congress in 2009.

Results from the Phase III ZETA study in hereditary and sporadic medullary thyroid cancer are expected in the second quarter of 2009.

The anti-cancer activity of *Zactima* continues to be evaluated in NSCLC and other tumour types, including colorectal, glioma, head and neck, breast and prostate cancers.

*Recentin* (cediranib) is a highly potent and selective-inhibitor of vascular endothelial cell growth factor (VEGF) receptor signalling in solid tumours, which inhibits all three VEGF receptors irrespective of activating ligand, and is suitable for once-daily oral dosing. It is currently in Phase III development in first-line colorectal cancer (CRC) and recurrent glioblastoma (rGBM).

In early 2008, our HORIZON III Phase II/III head-to-head study of *Recentin* with chemotherapy versus Avastin™ with chemotherapy in patients with first-line metastatic CRC progressed directly into Phase III. Patient recruitment was subsequently completed for both HORIZON III and HORIZON II, our Phase III study of *Recentin* with chemotherapy versus chemotherapy alone. The Phase III REGAL trial in rGBM comparing *Recentin* monotherapy versus lomustine +/- *Recentin* began enrolling patients in the fourth quarter of 2008.

Following the announcement that the National Cancer Institute of Canada Clinical Trial Group's (NCIC CTG) *Recentin* BR24 NSCLC trial would not be progressing straight into Phase III, we worked in close collaboration with the NCIC CTG to understand the BR24 data further and to assess the potential of *Recentin* in this disease area. Subsequently the NCIC CTG announced it would now investigate *Recentin* at 20mg plus carboplatin/paclitaxel versus carboplatin/paclitaxel alone in the BR29 study, which is expected to start recruitment in early 2009.

Encouraging Phase II data for *Recentin* from completed and continuing studies to investigate renal, rGBM, ovarian and prostate cancers were also presented in 2008.

ZD4054 is an oral once-daily potent and specific endothelin A-receptor antagonist in Phase III development. Data from Phase II studies suggested that ZD4054 10mg has the potential to increase median overall survival time by approximately seven months in men with metastatic hormone-resistant prostate cancer (HRPC), with the benefit of a generally well-tolerated side effect profile and a convenient once-daily tablet. The Phase III ENTHUSE studies are investigating

efficacy in metastatic HRPC, both as monotherapy and in combination with docetaxel, and in non-metastatic HRPC.

In December 2008, we ceased our collaboration with Infinity Pharmaceuticals for the development and commercialisation of Infinity's drug candidates IPI-504 (MEDI-561) and IPI-493 for the treatment of cancer and related conditions. This decision was taken after reviewing the potential opportunity for these projects and to take account of competing R&D investment priorities.

Our early oncology pipeline includes a range of novel compounds that target signalling pathways believed to be pivotal in cancer cell growth, invasion DNA repair and survival, with nine products in Phase II and 15 others in Phase I development. Phase II data from AZD6244, a potent MEK inhibitor licensed from Array BioPharma, showed biological activity in lung cancer and melanoma and studies will now focus on its use in combination with standard and other novel therapies, rather than its development as monotherapy. Phase II studies with the poly-ADP-ribose-polymerase (PARP) inhibitor AZD2281 have started and will initially focus on BRCA-mutated breast and ovarian cancer as well as other cancers where DNA repair could be defective.

The dual-specific Src/Abl kinase inhibitor, AZD0530, has shown a dramatic effect on biomarkers of cell motility and bone resorption and has started Phase II studies in ovarian cancer with others to follow. Among the compounds from the early portfolio continuing in development are AZD4877, a novel inhibitor of cell cycle; AZD7762, a tumour-selective chemosensitiser; and AZD8931. AZD1152, an aurora kinase inhibitor, has shown activity in acute myelogenous leukaemia and will commence Phase II/III studies in 2009. We are also developing potential new cancer treatments using biological approaches with highly defined molecular targets for patient populations with unmet medical needs.

CAT-8015 is an immunotoxin fusion protein that targets CD22, which is a receptor expressed on the surface of a wide variety of B-cell malignancies. CAT-8015 has orphan drug designation for hairy cell leukaemia in the US and EU. In 2008, the enrolment for studies continued in the CAT-8015 Phase I development programme.

Blinatumomab (MEDI-538) is a recombinant single-chain bi-specific T-cell engager (BiTE™) molecule that is being studied for use in certain

patients suffering from certain lymphomas and leukaemias. Exclusive rights to develop and commercialise blinatumomab in North America have been granted from Micromet.

The US Phase I programme with blinatumomab was suspended during 2008 in order to make appropriate modifications to the dosing regimen based on preliminary results from the EU studies.

#### FURTHER INFORMATION

In April 2008, Sun Pharmaceuticals launched generic amifostine in the US. In response, we extended an agreement with Bedford Laboratories to launch an authorised generic amifostine for oncology in the US. We have ceased all active promotion of branded *Ethyol* in the US. We have an active infringement action against Sun Pharmaceuticals regarding certain *Ethyol* patents.

Abraxane®, discovered, developed and owned by Abraxis, uses a novel technology to deliver paclitaxel for the treatment of breast cancer. During 2008, we co-promoted Abraxane® in the US under an agreement with Abraxis. In November 2008, we entered into an agreement with Abraxis under which Abraxis re-acquired exclusive rights to market Abraxane® in the US. Under the agreement, the board of Abraxis' parent ended the Co-Promotion Agreement. Upon termination, Abraxis will pay AstraZeneca a \$268 million fee on 31 March 2009.

#### FINANCIAL PERFORMANCE 2008/2007

##### PERFORMANCE 2008

###### Reported performance

Sales in Oncology increased by 3% on a reported basis to \$4,954 million up from \$4,819 million in 2007.

###### Performance – CER growth rates

Sales in the Oncology therapy area were down 2% at CER. *Arimidex* sales were up 4% to \$1,857 million. In the US, *Arimidex* sales were up 9% to \$754 million. In other markets, sales increased by 1% to \$1,103 million.

*Casodex* sales decreased by 12% to \$1,258 million, with sales in the US down by 2% and sales in other markets down by 15%.

*Iressa* sales for the year were up 3% as growth in China and other Emerging Markets more than offset the 3% decline in sales in Japan.

*Faslodex* sales were up 12% with a 5% increase in the US and 18% in other markets.

##### PERFORMANCE 2007

###### Reported performance

Oncology sales increased by 13% to reach \$4,819 million in 2007, compared with \$4,262 million in 2006.

###### Performance – CER growth rates

Oncology sales grew by 8% at CER. *Arimidex* sales reached \$1,730 million, up 10%. In the US, sales of *Arimidex* rose by 13% to \$694 million. Total prescriptions for *Arimidex* increased nearly 5.3% compared with 1.3% growth in the market for hormonal treatments for breast cancer. *Arimidex* sales in other markets increased by 8% to \$1,036 million. Sales for the full year were up 6% in Western Europe and increased 9% in Japan.

*Casodex* sales increased by 6% to \$1,335 million. Sales in the US for the full year were up 1% to \$298 million. Sales in other markets, which accounted for more than 75% of product sales, were up 8%, on 6% growth in Western Europe and 13% sales growth in Japan.

*Iressa* sales were unchanged for the full year. Sales in Japan increased 4% for the year; sales in China were up 24%.

*Faslodex* sales increased 10% to \$214 million for the full year, on growth of 3% in the US and 18% sales growth in other markets.

# RESPIRATORY AND INFLAMMATION

## 2008 IN BRIEF

- > **Symbicort** sales over \$2 billion, up 22%.
- > **Symbicort Rapihaler** (pMDI) licensed for long-term maintenance treatment of asthma in the US. Submissions made for use in COPD and paediatric asthma.
- > Outside the US, **Symbicort Turbuhaler SMART** now approved for use in managing asthma in over 90 countries.
- > **Symbicort Turbuhaler** now approved in COPD in over 80 countries.
- > The Joint Advisory Committee of the FDA concluded that the benefits of **Symbicort** outweigh the risks in adult and adolescent asthma patients.
- > Continued growth for **Pulmicort** with sales of \$1.49 billion.
- > Settlement of AstraZeneca's **Pulmicort Respules** patent infringement litigation against Teva including an exclusive licence to Teva to sell generic **Pulmicort Respules** from 15 December 2009 with significant royalties for AstraZeneca.

## OUR MARKETED PRODUCTS

**Symbicort Turbuhaler** (budesonide/formoterol in a dry powder inhaler) is a combination of an inhaled corticosteroid and a fast onset, long-acting bronchodilator for the treatment of asthma and COPD.

**Symbicort SMART** is licensed for maintenance therapy as well as for maintenance and reliever therapy in persistent asthma.

**Symbicort Rapihaler** (pMDI) (budesonide/formoterol in a pressurised metered-dose inhaler) for the maintenance treatment of asthma.

**Pulmicort** (budesonide) is a corticosteroid anti-inflammatory inhalation drug that helps prevent symptoms and improves the control of asthma.

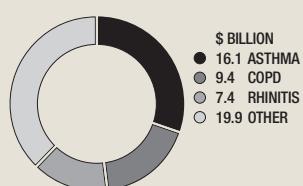
**Pulmicort Respules** (budesonide inhalation suspension) is the first and only nebulised corticosteroid in the US for the treatment of asthma in children as young as 12 months.

**Rhinocort** (budesonide) is a nasal steroid treatment for allergic rhinitis (hay fever), perennial rhinitis and nasal polyps.

**Oxis** (formoterol) is a fast onset, long-acting beta-agonist for treating asthma and COPD.

**Accolate** (zaflurkast) is an oral leukotriene receptor antagonist for the treatment of asthma.

## THERAPY AREA WORLD MARKET (MAT/Q3/08)



The prescription Respiratory world market value is \$53 billion.

The World Health Organization estimates that 100 million people worldwide suffer from asthma and more than twice that from chronic obstructive pulmonary disease (COPD), which is currently the fourth leading cause of death in the world with further increases in the prevalence and mortality of the disease predicted for the coming decades.

## OUR STRATEGIC OBJECTIVE

We aim to build on our strong position in asthma treatment through the growth of key products, particularly **Symbicort**, with new indications and market launches as well as developing novel approaches to other areas of inflammatory disease such as chronic obstructive pulmonary disease (COPD) and rheumatology.

## COPD AND ASTHMA

COPD is expected to become the world's third biggest health threat by 2020. Current treatment has recently demonstrated some survival benefit but the prognosis of the COPD patient remains poor. In asthma, morbidity and mortality remain important issues and disease normalisation is not achieved by any treatment.

The typical treatment across COPD and asthma is a fixed-dose combination of an inhaled corticosteroid (ICS) with a long-acting beta-agonist (LABA) or for COPD specifically, inhaled long-acting muscarinic agonist (LAMA). Other major asthma treatments include oral leukotriene receptor antagonists and oral steroids for severe disease and (in combination with antibiotics) for exacerbations. Significant new product classes impacting the asthma market up to 2015 are unlikely. First novel anti-inflammatory compounds aimed mainly at prevention and/or treatment of COPD exacerbations, such as oral phosphodiesterase 4 inhibitors, may appear on the market before 2015.

**Symbicort SMART** flexible dosing introduced a step change to asthma care in Europe resulting in lower ICS and oral steroid use. Novel ICS/LABA combination products for this area are expected from 2009 and generic ICS/LABA combinations may be available from the early part of the next decade. Several companies are developing new biologics for severe asthma, including improved versions of anti-IgE and differentiated anti-cytokine antibodies. Post-2015, immune response modifiers could deliver intermittent therapy for moderate to severe asthma.

A number of novel COPD combinations in industry pipelines may change the way in which COPD is managed. Combinations of LABAs, LAMAs and triple-combinations with existing and new anti-inflammatories, may become future treatments of choice. There are also agents in early development with the potential to change the course of the disease by targeting the immune and inflammatory response that results in lung damage.

## OUR FOCUS

### Our key marketed products

**Symbicort Turbuhaler** provides rapid, effective control of asthma and effective reduction of exacerbations, improving symptoms and providing a clinically important improvement in the health of patients with severe COPD.

**Symbicort Rapihaler** (pMDI) approved for the long-term maintenance treatment of asthma in patients 12 years of age and older, was launched in the US in 2007. Further information about the progress of **Symbicort** since its launch in the US is set out in the Geographical Review on page 49. In December 2008, the Joint Advisory Committees of the FDA completed a review of the benefits and risks of asthma medications containing LABAs. This concluded that the benefits of **Symbicort** outweigh the risks in adult and adolescent asthma patients.

**Symbicort SMART** provides increased asthma control and simplifies asthma management through use of only one inhaler for both maintenance and relief of asthma symptoms. It is also a cost-effective treatment option for many healthcare payers. **Symbicort SMART** is included in the Global Initiative for Asthma, the international treatment guidelines.

The US sNDAs for **Symbicort Rapihaler** (pMDI) in COPD and paediatric asthma in the US were submitted as planned during the second quarter of 2008. Our existing regulatory filings for **Symbicort Rapihaler** (pMDI) in the EU for asthma and COPD were supplemented with data supporting two additional strengths in the second half of 2008.

**Pulmicort** remains one of the world's leading asthma medicines and is available in several forms. **Pulmicort pMDI** is now approved in 98 countries.

Information about our settlement of the patent infringement action against IVAX in the US, which began in October 2005, in relation to IVAX's ANDA for a budesonide inhalation suspension is set out in Note 25 to the Financial Statements from page 154.

**Oxis** is added to the treatment regime when corticosteroid treatment alone is not adequate. **Oxis** is also indicated for symptom relief in COPD.

**Rhinocort** combines powerful efficacy with rapid onset of action and minimal side effects and is available as a once-daily treatment in the **Rhinocort Aqua** (nasal spray) and the **Turbuhaler** dry powder inhaler forms.

## OUR FINANCIAL PERFORMANCE

	2008			2007			2006			2008 compared to 2007		2007 compared to 2006	
	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth \$m	Growth due to exchange effect \$m	Sales \$m	CER growth %	Reported growth %	CER growth %	Reported growth %	CER growth %	Reported growth %
Pulmicort	1,495	7	34	1,454	128	34	1,292	–	3	10	13		
Symbicort	2,004	346	83	1,575	265	126	1,184	22	27	22	33		
Rhinocort	322	(41)	9	354	(16)	10	360	(12)	(9)	(4)	(2)		
Oxis	71	(21)	6	86	(9)	7	88	(24)	(17)	(10)	(2)		
Accolate	73	(4)	1	76	(6)	1	81	(5)	(4)	(7)	(6)		
Other	163	(9)	6	166	7	13	146	(5)	(2)	5	14		
<b>Total</b>	<b>4,128</b>	<b>278</b>	<b>139</b>	<b>3,711</b>	<b>369</b>	<b>191</b>	<b>3,151</b>	<b>7</b>	<b>11</b>	<b>12</b>	<b>18</b>		

### Clinical trial developments

In the latter part of 2008, data from one of the pivotal US COPD studies were published (SHINE), confirming the efficacy and tolerability of *Symbicort Rapihaler* (pMDI) in COPD.

### In the pipeline

Our monoclonal antibody (MAb) programmes for asthma treatments focus on targeting interleukins which appear to play a role in the regulation of inflammatory and immune responses and, therefore, may improve the treatment and/or prevention of asthma. Most of these MAbs are in Phase II to assess their potential to affect the significant remaining unmet medical need in the disease including uncontrolled asthma and moderate to severe persistent asthma. Concurrent Phase I activity is supporting our understanding of the impact of these large molecules on asthma biology.

*MEDI-563* is an investigational approach that may treat or help prevent asthma by targeting the interleukin-5 (IL-5) receptor to neutralise the binding of IL-5 and deplete the cells expressing the IL-5 receptor, typically eosinophils, as both IL-5 and eosinophils are thought to play key roles in the pathology of asthma. In 2008, the results of a Phase I study presented at the European Respiratory Society meeting showed that *MEDI-563* exhibited an acceptable safety profile and showed pharmacological activity in mild asthmatics. In addition, a Phase I study to measure the depletion of eosinophils in the airways of asthmatics and a Phase II study with this anti-IL-5 receptor MAb to assess whether it can reduce the incidence of asthmatic relapse in subjects following an asthmatic episode that required hospitalisation have been initiated.

Also in 2008, we completed two out of three ongoing Phase IIa studies evaluating the potential for *MEDI-528* (anti-IL-9 MAb) to treat or prevent symptomatic, moderate to severe persistent asthma, and a fourth Phase IIa clinical trial, designed to assess its effectiveness in patients with stable asthma and exercise-induced bronchoconstriction, was initiated.

*CAT-354* targets interleukin-13 (IL-13). In 2008, we initiated two new studies with *CAT-354*: a Phase II trial in Europe and Australia designed to assess the potential of this MAb in patients with uncontrolled asthma despite optimal treatment, and a US Phase I study to assess pharmacokinetics in healthy adult patients.

The early pipeline has been reshaped to focus more on COPD, looking for novel strategies to inhibit exacerbations in COPD which include regulation of inflammatory cell migration and activation with MAbs directed to antigen. These include CXCR3, as well as inhibition of molecules involved in both viral and bacterial mediated exacerbations. A number of small molecule approaches for the treatment of COPD are in development. *AZD1236* is a potent MMP inhibitor currently in Phase II, the expression of these proteins are associated with key pathological features of the disease including bronchiolitis, vasculitis and emphysema. Human Neutrophil Elastase (HNE) is a key factor in cigarette smoke induced inflammation, lung injury and emphysema and *AZD9668*, a potent and selective oral, reversible inhibitor of HNE, also in Phase II, is expected to reduce the progression and severity of COPD.

Alongside these novel approaches and building on our capabilities in combinations and device development demonstrated through our experience with *Symbicort*, we are aiming to improve further the symptom relief delivered by on-market bronchodilators, the mainstay of treatment for all COPD patients. By combining two enhanced bronchodilators in one inhaler, patients should benefit from improved symptom control, as well as reducing the complications of multiple dosing or inhaler devices.

Strategic collaboration activity makes a key contribution to our respiratory pipeline. AstraZeneca and MAP Pharmaceuticals announced in December 2008 an exclusive worldwide agreement to develop and commercialise Unit Dose Budesonide (UDB), MAP Pharmaceuticals' proprietary nebulised formulation of budesonide. This agreement

is subject to review in the US under the Hart-Scott-Rodino Act and becomes effective after the waiting period has ended. UDB is being developed by MAP Pharmaceuticals as a potential treatment for paediatric asthma and is currently in Phase III clinical development. UDB has the potential to be nebulised more quickly and at a lower nominal dose than the commercially available product. AstraZeneca and Dainippon Sumitomo have a well-established alliance to discover and develop small molecules directed towards toll-like receptor 7 and the first compound from this alliance has entered early stage development.

The partnership with Dynavax Technologies Corporation, which began in 2006, continues to pursue opportunities in the field of toll-like receptors. Dynavax has unique competence in generating immunostimulatory DNA sequences that activate toll-like receptors. The alliance should enable us to expand our portfolio of small molecule and biological drugs to treat asthma and COPD.

Our 2007 discovery alliance with Argenta Discovery Limited aimed at identifying improved bronchodilators to treat COPD continues.

Our three-year research collaboration with Silence Therapeutics, established in 2007, is continuing. In 2008 we entered into a new collaboration with this company focused on the development of a range of novel approaches for the delivery of siRNA molecules, which allows both Silence Therapeutics and AstraZeneca to commercialise the novel delivery systems we develop together.

## RHEUMATOLOGY

Rheumatoid arthritis (RA) is currently treated with generic disease-modifying anti-rheumatic agents and, where the relevant criteria are met, biologic disease-modifiers. There remains a need for novel effective treatments since only about a third of patients treated with biologics achieve their treatment goals.

The RA market has grown from \$1.3 billion in 1998 to over \$10 billion in 2008, driven largely by the introduction of biologic tumour necrosis factor alpha (TNF $\alpha$ ) blockers (first Amgen/Wyeth's Enbrel $^{\text{TM}}$ , followed by Centocor/Schering-Plough's Remicade $^{\text{TM}}$  and Abbott's Humira $^{\text{TM}}$ ), which together account for over \$8 billion in this disease alone. Launches of additional TNF blockers are imminent, and use of other biologic approaches, currently reserved for TNF failures, is expected to increase. Targeted novel oral drugs aimed at patients that currently choose not to take, are ineligible for or don't respond to biologics, are in development to provide anti-TNF-like efficacy with safety benefits and more convenient dosing.

Current treatment of systemic lupus erythematosus (SLE) focuses on controlling disease flares, preventing renal failure and suppressing symptoms to an acceptable level while minimising toxicity. Despite considerable recent development activity, no targeted disease-modifying agents have yet been successfully launched for SLE. Most emerging biologic agents will likely be used initially in combination with corticosteroids or immunosuppressants to provide incremental benefit and/or allow reduced doses or numbers of these agents.

## OUR FOCUS

### In the pipeline

In 2008, we invested in several novel multi-functional MAbs that allow simultaneous inhibition of either two secreted proteins or surface receptors. Our first disease being studied is RA, where TNF inhibitors with other molecules may improve both the efficacy and prevent the establishment of TNF refractory disease while maintaining an acceptable safety profile.

MEDI-545 is a MAb targeting interferon-alpha, which regulates processes involved in autoimmune diseases. In 2008, we initiated a Phase IIa trial in patients with SLE and a Phase I study in patients with active dermatomyositis.

CAM-3001 is a MAb with potential to help patients with RA. The antibody targets the alpha sub-unit of the granulocyte-macrophage colony stimulating factor receptor. In September 2008, preliminary results were reviewed from the first Phase I study of CAM-3001, which had been initiated to evaluate the safety profile and tolerability of single doses in patients with RA.

AstraZeneca, through its acquisition of MedImmune, acquired exclusive development rights to the CAM-3001 programme from CSL Limited in 2007.

AZD9056 and AZD5672 are novel oral compounds being primarily developed as a new generation of disease modifying anti-rheumatoid arthritis drugs. Currently in Phase IIb, their different mechanisms of action (a P2X7 antagonist and a CCR5 antagonist) provide multiple chances of success to provide significant new choice in the management of RA.

We also have an ongoing alliance with Bayer Schering in respiratory and rheumatology indications with the objective of identifying novel compounds without steroid side effects.

## FURTHER INFORMATION

Patent infringement litigation filed by AstraZeneca against IVAX Pharmaceuticals (a wholly owned subsidiary of Teva Pharmaceuticals USA (Teva)) following the submission of an ANDA with the FDA for generic *Pulmicort Respules* was settled in November 2008. Under the terms of the settlement, Teva concedes that the patents asserted by AstraZeneca in the litigation are valid and enforceable and that its generic version of *Pulmicort Respules* infringes AstraZeneca's patents. See Note 25 for further details.

## FINANCIAL PERFORMANCE 2008/2007

### PERFORMANCE 2008

#### Reported performance

Sales in Respiratory and Inflammation therapy area (R&I) increased by 11% to \$4,128 million from \$3,711 million in 2007.

#### Performance – CER growth rates

R&I sales grew by 7% at CER.

Sales of *Symbicort* grew by 22% to \$2,004 million. In the US, sales of the product were \$255 million, up 410%. Product trial rate among target specialist physicians is now approaching 90%; these specialists are now starting more than 30% of patients new to combination therapy on *Symbicort*. More than half of target primary care physicians have prescribed *Symbicort*, and share of new patient starts is just under 18%. Overall, *Symbicort* share of new prescriptions for fixed combinations reached 11.7% in the week ending 16 January, with market share among patients newly starting combination treatment at 18.3%. *Symbicort* sales in other markets in the year were \$1,749 million, up 9%. *Symbicort SMART* has now been approved in 91 markets.

*Pulmicort* sales were flat at \$1,495 million, with US sales up 2% as the generic competition from the Teva product affected quarter four sales. US sales for *Pulmicort* were down 15% to \$260 million in the fourth quarter and *Pulmicort Respules* sales were down 18% as a result of the "at risk" launch of generic budesonide inhalation suspension (BIS) on 18 November. The patent litigation between Teva and AstraZeneca was subsequently settled on 26 November. The agreement allows Teva to commence sales of BIS under an exclusive licence from AstraZeneca beginning 15 December 2009. The agreement also provided that any product already shipped by Teva would remain in the market to be further distributed and dispensed. As a result, Teva products accounted for nearly 15% of total prescriptions for BIS products dispensed during the fourth quarter, including a 40% share in December 2008. US sales for *Pulmicort* for the full year were \$982 million. *Pulmicort Respules* accounted for around 90% of total *Pulmicort* sales in the US. Sales of *Pulmicort* in Rest of World were down 2% for the full year to \$513 million.

## PERFORMANCE 2007

#### Reported performance

Continued growth from *Symbicort* drove the increase in reported sales for R&I, which grew by 18% from \$3,151 million in 2006 to \$3,711 million in 2007.

#### Performance – CER growth rates

Sales in R&I increased by 12% at CER.

*Symbicort* sales for the full year were up 22% to \$1,575 million. Sales in Western Europe were up 16%, with market share up another point in the last 12 months, aided by the roll-out of the *Symbicort SMART* regime. Good growth for the year was achieved in Canada (up 25%) and in Emerging Markets (up 26%). Sales in the US were \$50 million since launch at the end of June 2007. Specialist physicians rapidly adopted the product; nearly 75% of allergists and more than 60% of pulmonary specialists in our target audience have prescribed *Symbicort*. *Pulmicort* sales increased by 10% to \$1,454 million. US sales increased 15% for the full year to \$964 million. *Pulmicort Respules* sales in the US were up more than 20% for the full year, on estimated volume growth of 15%. Of the approximately six million children under the age of eight who are treated for asthma, more than one million benefit from treatment with *Pulmicort Respules*. Sales in other markets were unchanged for the year.

*Rhinocort* sales fell by 4% to \$354 million, with a 9% decline in the US being compensated by small gains elsewhere.

**ASTRA TECH**

Astra Tech is engaged in the research, development, manufacture and marketing of medical devices and implants for use in healthcare, primarily in urology, surgery and odontology. It has a leading position in several countries in Europe and is expanding its operations in key markets, particularly in the US, Japan and South East Asia.

All product lines showed continued good sales growth in 2008. In pursuit of its growth strategy for Astra Tech Dental, the sales and marketing organisation for dental implants was further expanded during the year. Despite the downturn in the world economy, which negatively impacted business in the US, strong sales growth was achieved in major European countries as well as North America and Astra Tech increased its market share in the major markets. The economic slowdown is expected to continue to adversely impact demand in 2009.

In March 2008 a Regional Office for South East Asia was established in Malaysia, in order to provide an improved support and service to our customers in the region. Atlantis, which was acquired in 2007 and has provided Astra Tech with a new platform for development within digital dentistry is offering an important opportunity for continued growth for the dental implants product line. During the year a European manufacturing facility for Atlantis products was built at the company's headquarters site in Mölndal. Production started in October to supply all European markets.

The Astra Tech Training and Education Program has been further developed and in combination with its state-of-the-art Centre for Training and Education at its headquarters, advanced international education programmes and seminars are now being offered to existing and potential customers. Further investments have been made in R&D, clinical research and new production facilities to strengthen the product portfolio.

**APTIUM ONCOLOGY**

For more than 25 years, Aptium Oncology has been developing and managing hospital-based outpatient cancer centres in the US. Its distinctive and comprehensive approach to cancer care incorporates all outpatient oncology and ancillary services in a single facility for maximum patient comfort and convenience.

Ownership of Aptium Oncology gives us a unique window to the provider sector of the US oncology market and, through Aptium Oncology's network of over 160 physicians, access to many opinion leaders in the field of oncology who can help shape early phase drug development decisions. It is also involved in clinical trial delivery for a number of our pipeline products and provides scientific advice and staff training for oncology teams.

In 2008, Aptium Oncology continued to perform well in its cancer centre management business with positive profit and cash flow contributions. Focused on growth, Aptium Oncology continued to invest in sales and marketing. The resulting expansion of its consultancy business is creating new opportunities for management relationships in new markets in the US, with growing interest from international sources.

Clinical research is an integral part of care delivery at Aptium Oncology's affiliated cancer centres. In 2008, the company established the Aptium Oncology GI Cancer Consortium, bringing together eight leading US academic institutions that will collaborate to speed the process of finding and testing active new compounds for patients with gastrointestinal cancers.

# ENVIRONMENTAL SUSTAINABILITY

In this section, we describe our commitment in two key areas of environmental sustainability: managing our carbon footprint and understanding the potential impact of pharmaceuticals in the environment. More information about our work in these areas and others, such as waste management, resource efficiency, biodiversity and emissions to air and water, can be found on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

We continue to track, actively participate in, and pursue initiatives relating to international research and policy developments associated with emerging safety, health and environment (SHE) policy and legislative matters.

## CLIMATE CHANGE

We are committed to minimising our impact on climate change and in recent years we have been making good progress in reducing our greenhouse gas emissions. In 2008 our total emissions from all sources were 5% lower than in 2007. Data on our performance over the last three years is provided on page 15.

In common with most businesses, our emissions arise from the energy we use at our facilities, from other in-house activities and from the various means of transport we use. Our carbon footprint is also affected by some of our respiratory therapies, specifically our pressurised metered dose inhaler (pMDI) products which rely on propellants such as hydrofluoroalkane (HFA, a greenhouse gas), to deliver the medicine to the airways. Patients who are unable to use our *Turbuhaler* dry powder inhaler, which does not require propellants, need these pMDI products. We believe that the expanded treatment choice and potential benefits that they offer outweigh the potential impact on the environment.

The business of developing, manufacturing and distributing innovative medicines is increasingly complex and uses energy both in our facilities and in travel and transport. We continue to drive the implementation of initiatives and programmes that are focused on managing our carbon footprint across key areas of our business activity. For example, recognising the significant global warming emissions from business road travel for sales and marketing activities, we continue to invest in advanced driver training to improve both safety and efficiency associated with road travel and we are increasingly using a range of hybrid and alternative fuel vehicles.

Other areas in which we are driving further improvement include:

- > Implementation of green technology principles in our process design.
- > Exploring the potential for further investment in low carbon and renewable energy options at our sites.
- > Further investment in greener energy supply from external power suppliers.
- > Implementation of further energy conservation programmes, particularly related to fume cupboards in laboratories.

Alongside this, we also continuously seek to use external opportunities to share learning and foster best practice. For example, as part of prioritising the selection of goods transport partners on the basis of their reliability, quality and internal safety, health and environmental management, we take into consideration the efficiency of their air and road fleets. In 2008, AstraZeneca, in conjunction with our European road freight and logistics provider, was recognised in the European Outsourcing Awards for the success of a new initiative to co-load our product into vehicles with product from other companies – minimising vacant space and significantly reducing costs and environmental impact.

## OUR TARGETS

We continue to work hard to manage our environmental impact without compromising our ability to deliver new therapies for important areas of healthcare. Our current climate change targets, approved by the Board in 2005, aim to ensure that our absolute emissions in 2010 will be no greater than they were at the start of the decade and 55% less than they were in 1990.

This requires substantial efforts to be made across our business to produce, by 2010, an absolute reduction of 12% in global warming emissions from all sources other than pMDIs, when compared with 2005. More details about our reduction targets and performance can be found on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

We are currently in the process of developing a new environmental sustainability strategy, together with associated objectives and targets, which will take us beyond 2010 and drive our continued commitment in this important area.

## PHARMACEUTICALS IN THE ENVIRONMENT

The presence of trace amounts of pharmaceuticals in the environment (PIE) resulting from patient excretion is an inevitable result of the way most current medicines work: pharmaceuticals need to be stable enough to have a useful shelf life and oral dosage forms must be robust enough, in most cases, to pass through the stomach intact.

Continued publication of data relating to the presence of pharmaceutical residues in surface waters and more recently also in drinking water has stimulated a wider debate. We understand the concerns these publications raise and are committed to addressing this issue responsibly.

Whilst the scientific studies published to date suggest that the low levels of pharmaceuticals detected in the environment are unlikely to pose a risk to human health, we continue to develop a better understanding of the potential long-term effects on aquatic life. We are committed to ensuring that any potential adverse effects are responsibly balanced against the benefits our medicines bring to patients.

This is an ongoing priority for our scientists at our Environmental Laboratory in Brixham, UK, who are at the forefront of this field of science, working both independently and in collaboration with other companies, leading academics and regulatory bodies to advance PIE-related research. We recently invested \$24 million in new laboratories at the Brixham site to further improve the facilities for the evaluation of the environmental fate and persistence of pharmaceuticals.

The environmental profile of our new pharmaceuticals is assessed prior to applying for government approval in a manner that is consistent with applicable regulatory regimes. In addition, many of our existing products are assessed to comply with the new EU requirements in connection with post approval applications.

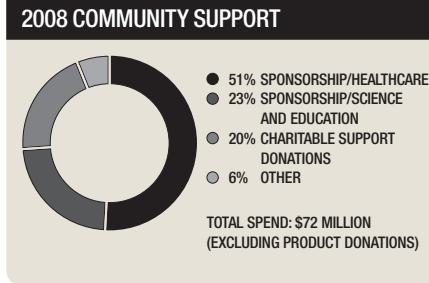
We have also introduced internal Environmental Risk Management Plans that will accompany all new medicines and which will enable all available environmental data for a product to be taken into account at key decision points during development.

## IN THE GLOBAL COMMUNITY

Consistent with our overall commitment to product stewardship and sustainable production, AstraZeneca manufactures its products in accordance with strict regulatory requirements and our processes are designed to avoid, or otherwise minimise, the loss of product to the environment. We will continue to proactively manage emissions of active pharmaceutical ingredients from manufacturing activities, integrate "green chemistry" principles into our operations, and otherwise ensure that any residual losses of pharmaceuticals to the environment that do occur are at levels that would be unlikely to pose a threat to human health or the environment.

We make our environmental risk data, together with available information on our existing products, publicly available via the Swedish Doctors Prescribing Guide website using the voluntary disclosure system introduced by the Swedish Association of the Pharmaceutical Industry (LIF). The system was developed by LIF and a number of Swedish stakeholders, in conjunction with expert representatives from international pharmaceutical companies, convened and chaired by AstraZeneca. We are also working with the Association of the British Pharmaceutical Industry, to help the Environment Agency for England and Wales to evaluate the risks of the existing medicines on their priority action list.

We continue to be active in communicating and discussing our research and initiatives at international and national conferences with academia and other stakeholders. We also participate in informal networks and are active in proposing topics of interest for discussion at scientific conferences and with non-governmental organisations.



Wherever AstraZeneca is located worldwide, we aim to make a positive contribution to our local communities through charitable donations, sponsorships and other initiatives that help to make a difference. Our activities focus on bringing sustainable benefit in ways that are consistent with our business of improving health and quality of life, and on promoting the value of science among young people.

In 2008, we spent a total of \$718 million (2007: \$588 million) on community sponsorships and charitable donations worldwide, including \$646 million of product donations, valued at average wholesale prices (2007: \$518 million).

We also contribute where possible to disaster relief efforts. During 2008, following the earthquake tragedy in China, we committed a total of \$2 million to the immediate relief effort and to a longer-term programme designed to help the affected communities rebuild their lives. Following the devastating cyclone in Myanmar (Burma), we committed a further \$200,000 to increase Red Cross emergency relief stocks held in the charity's regional Disaster Response Centre in Kuala Lumpur, which was originally established with \$700,000 of funding from AstraZeneca in 2005.

### IN THE DEVELOPING WORLD

Whilst we remain committed to making a contribution to improving healthcare in the developing world, we believe that real progress can only be made through the commitment of all the related stakeholders, including governments, non-governmental organisations (NGOs) and the international community, as well as the private sector.

The medicines in our range today are not relevant to the treatment of tuberculosis (TB), HIV/AIDS and malaria, the most significant healthcare problems that many developing world countries are currently facing, but we are applying our skills and resources to helping in other ways.

### DEDICATED RESEARCH

We have a dedicated scientific resource in Bangalore, India that focuses on finding a new, improved treatment for TB – a major cause of illness and death worldwide, especially in Asia and Africa. AstraZeneca is the only major pharmaceutical company with a research programme in India totally dedicated to TB. Further information can be found in the Infection section on page 59.

### WORKING IN PARTNERSHIP

As well as the availability of appropriate medicines, effective healthcare depends on having a functional healthcare system in place that ensures medicines are used to full effect as part of overall health management. In some parts of the developing world, this is a particular challenge. To help meet this challenge, we continue to partner with NGOs and other organisations working with local communities to strengthen their healthcare capabilities.

Key principles for these partnerships are that they lead to positive measurable outcomes, can be scaled up and potentially replicated to improve outcomes for a greater number, and can deliver a sustainable framework that can ultimately be owned and managed locally without the need for our continued support. We also aim to ensure that such partnerships can contribute to AstraZeneca's business development, by enabling us to understand better the health needs, and build important relationships in future markets.

Our long-standing partnership with the British Red Cross and Red Crescent Societies includes support to programmes in Central Asia that are helping to combat TB and improve the quality of life of people living with TB and TB/HIV co-infection in the hard-hit areas of Turkmenistan, Kyrgyzstan and Kazakhstan. Work is community-based and progress to date includes over 7,500 people successfully completing their TB treatment, with treatment completion rates exceeding 90% among the most poor and vulnerable, and public awareness campaigns that have reached over one million people. Overall, this work is contributing to the implementation of national programmes that are leading to a stabilisation and reduction in the incidence of TB in these countries.

Our partnership with the African Medical and Research Foundation (AMREF) is focused on developing a model for the integrated management of TB, HIV/AIDS and malaria at both national and local levels in Uganda, where there is high incidence of all three diseases. This integrated management approach has not been widely addressed previously and we are one of the few organisations involved in such work. A pilot programme is now underway in the high incidence areas of Luwero and Kiboga districts of central Uganda. Progress includes increased detection rates (from 59% in March to 73% in June in the Luwero district) and the training of village health teams in 14 villages. Work with the district health teams is also delivering better health planning and co-ordination.

In Ethiopia, our partnership with Axios is focused on building local capability in managing breast cancer – the second most common cancer among young women in that country. The project has focused on strengthening diagnosis and treatment capabilities, including the creation of previously unavailable treatment protocols and standardised reporting guidelines for use across the country.

Our support to Voluntary Service Overseas (VSO) includes the secondment of a senior manager to the organisation to help them further develop their strategy and framework for delivering their health goals. We also fund VSO volunteers working to build local healthcare capabilities in underserved communities across Africa and Asia. Alongside this, we are enabling our employees to volunteer for placements in appropriate countries to support VSO, drawing on the broad range of skills they can offer in human resources, finance, IT and communications, as well as health and medicine.

More information about these partnerships and our other activities worldwide is available on our website, [astrazeneca.com/responsibility](http://astrazeneca.com/responsibility).

### ENGAGING AT AN INTERNATIONAL LEVEL

As part of our focus on TB, we actively engage in international efforts to help in the fight against this devastating disease. In some cases, our external collaboration specifically supports our own research effort by providing opportunities for gaining valuable external input and sharing of best practice.

During 2008, we helped fund and participated in the third Open Forum on Key Issues in TB Drug Development, organised by the Bill and Melinda Gates Foundation, the Global Alliance for TB Drug Development, Treatment Action Group and the Stop TB Partnership Working Group on New Drugs. The meetings are designed to bring together TB drug developers, regulators and other interested stakeholders, such as TB care providers, public health policy-makers, and community advocates. The agenda is focused on addressing key issues in the discovery, development and registration of new TB treatments.

We also stepped up our involvement with the Stop TB Partnership during 2008. AstraZeneca is now a member of its International Board, which provides leadership and direction and monitors the implementation of agreed policies and plans.

## MANAGING RISK, PRINCIPAL RISKS AND UNCERTAINTIES

As a global, research-based pharmaceutical company, we face a diverse range of risks and uncertainties that may adversely affect our business.

We work continuously to ensure that we have effective processes in place for identifying, assessing and managing these risks appropriately, in line with our strategic objectives, the material needs of our stakeholders and our core values. As part of this, we continue to monitor our business activities and our external and internal environments for new and emerging risks, including environmental, social and governance matters, to ensure that these are captured and managed at the appropriate level.

In this section we describe our key risk management and assurance mechanisms, together with the associated accountabilities and the principal areas of risks and uncertainties that we currently consider to be material to our business in that they may have a significant effect on our financial condition, results of operations and/or reputation. Where relevant, specific risks and uncertainties are also discussed at various points in the Directors' Report.

### EMBEDDED IN BUSINESS PROCESSES

Risk is an inherent part of doing business, and our approach to risk management is designed to encourage clear decisions on which risks we should take and to provide assurance that the commercial, financial, compliance and reputation implications of these risks are adequately understood and managed to an acceptable level.

We constantly strive to ensure that risk management is embedded within our existing business processes and performance management processes. The Group maintains a long-term business plan, updated annually, to support the delivery of its strategy. Each Senior Executive Team (SET) area and key functions are required to provide a comprehensive assessment of their risks as part of the annual business plan update. The Chief Executive Officer and the Chief Financial Officer undertake quarterly business reviews (QBRs) with each SET area at which the key risks are reviewed. To support this review, key functions within each SET area are required to provide quarterly updates on their key risks.

## RISK MANAGEMENT & ASSURANCE PROCESSES

### OVERSIGHT OF RISK MANAGEMENT AND ASSURANCE PROCESSES

Board and Audit Committee

### MONITORING AND REVIEW OF RISK MANAGEMENT AND ASSURANCE PROCESSES

Senior Executive Team with delegation as considered appropriate within the Group

### MANAGEMENT OF RISKS

Line management within relevant business areas and functions

### RISK ASSURANCE PROCESSES

Global Compliance and the Finance Function provides global oversight and co-ordination. SET area compliance officers and specialist compliance functions provide agreed monitoring and assurance processes within the business. Group Internal Audit provides independent assurance and advice in areas agreed with the Audit Committee and the SET in its annual plan.

Our Code of Conduct and Global Policy framework require all employees to maintain consistent standards of responsible behaviour. Compliance with the Code of Conduct, the related policies and standards is mandatory. Employees are encouraged to raise questions about how to apply these standards and to report suspected breaches and incidents of non-compliance through our continuous assurance process or the AZethics line and other reporting channels described in the Code of Conduct. Compliance with mandatory standards is also subject to ongoing monitoring and review by our compliance functions and Group Internal Audit (GIA), in accordance with its annual plan, agreed with the SET and the Audit Committee.

To strengthen further our high-level corporate responsibility (CR) management capability, during late 2007/early 2008 we established a dedicated Global CR Team of experienced CR professionals from around the Group. The Global CR Team leads the development of our CR strategy and the alignment of tactical delivery, working closely with Global Compliance to ensure that the CR risks and opportunities are identified and managed appropriately, in line with business objectives.

In early 2009, we developed a combined Compliance and Corporate Responsibility 'Responsible Business' scorecard with defined objectives and accountabilities, to track performance consistently across all SET areas and enable quarterly reporting to SET, the Audit Committee and Professor Dame Nancy Rothwell (the Non-Executive Director with responsibility for overseeing CR within the Company), as well as annual reporting to the Board and SET. We plan to introduce this new scorecard during 2009.

### KEY ACCOUNTABILITIES

The Board, and specifically the Audit Committee, are accountable for monitoring and overseeing the risk management systems and processes implemented by management and for assessing their adequacy and effectiveness. In addition to direct assurances from senior management through the performance management and monitoring process, they receive and review a Group-level risk summary from the annual business planning process and QBRs. They also receive quarterly incident reports and updates on compliance initiatives from the Global Compliance Officer, and information in respect of audits in relation to certain risks, carried out by GIA, in accordance with its annual audit plan.

SET members are accountable for ensuring sound risk management, control and assurance processes within their SET areas. They actively participate in the annual and quarterly risk review processes and receive quarterly reports on key compliance incidents and the outcomes of audits in their SET area. They are also required to complete an annual assurance statement to confirm that effective risk management and control processes have been operating throughout the year.

Line and project management are accountable for the management of risk within the context of their functional or cross-functional remit or project. To support and underpin the work of line and project management and the SET in managing risk, we have developed systems and processes to ensure the effective identification, management and reporting of key risks. A risk management policy, with guidelines and supporting tools ensures that managers can recognise, assess and actively manage the challenges in their areas.

Our compliance organisation is comprised of a wide range of specialist groups who work with line management and the SET to develop systems and processes for managing risk in specific regulated areas to ensure ongoing legal and regulatory compliance. These groups include Good Laboratory, Clinical and Manufacturing Compliance, SHE, Medical and Regulatory Affairs, Financial Control and Compliance, Information Security and Data Privacy, Sales and Marketing Compliance and Legal and Intellectual Property.

Both line management and these specialist functions are supported by the Global Compliance function that acts as the primary reporting channel to Board and SET on compliance matters and is accountable for overseeing compliance globally and managing the Group's compliance programme.

Against the background of the key accountabilities set out in this section, the Board believes that adequate information was made available to it in order to identify the key risks and uncertainties facing the business, further information of which is set out in the Principal Risks and Uncertainties section on page 76.

#### KEY COMMITTEES AND COUNCILS

Our quarterly business review process serves as the primary mechanism for monitoring the effectiveness of business performance and risk management and is embedded into existing management team meetings. In addition to this we operate a number of management committees and councils to monitor Group-wide compliance and reputation risks including the Global Compliance Committee (GCC) (further details of which can be found in the Compliance and Group Internal Audit section on page 93) and the Issues Management Council (IMC).

The IMC monitors our external environment for new and emerging issues relating to our business that affect or concern our stakeholders and works with the people who are responsible for managing the issues internally to agree appropriate actions, timelines and, where possible, key performance indicators. The Vice-President, Group Public Affairs chairs the IMC and is also a member of the GCC to ensure that any reputational risk is fully captured at the appropriate level.

#### BUSINESS RESILIENCE PLANS

Our approach to risk management includes the development of business resilience plans, and such plans are designed to provide for situations in which specific risks have the potential to have a severe impact on our business. During 2008, our business resilience planning activities focused on improving our existing crisis management processes, planning and response structures, including plans, escalation processes and crisis communications. A global standard for crisis management has been rolled out during 2008, and during 2009 a global policy for business resilience, to cover crisis management, business continuity and emergency response will be communicated. This will ensure alignment of documentation, appropriate training of line managers and the use of crisis simulation activities to test the new procedures.

#### WORKING WITH SUPPLIERS

We believe that effective risk management extends to managing any potential reputational risks associated with our purchasing activities. We are therefore committed to working only with those suppliers who embrace standards of ethical behaviour consistent with our own. This applies across the full range of our purchasing activities, from promotional items to pharmaceutical ingredients, and includes any specialised work for which we use external contractors to complement our in-house effort. It also applies as much to our expanding business in Emerging Markets as it does to our existing supplier relationships.

We are in the process of revising and strengthening our Corporate Responsibility Principles in Purchasing, which we first launched in 2003 to provide guidance for our purchasing community on integrating CR considerations into their activity. The strengthened guidance will become a new Global Responsible Procurement Standard and will provide the framework for developing and implementing the programmes needed to ensure that we effectively and consistently incorporate our standards of ethical behaviour into our procurement activity worldwide. Launch of the new standard is planned for the first half of 2009 and targeted training will be subsequently provided.

#### A rolling implementation

Integrating responsible business considerations into all of our supplier relationships around the world will take time. CR considerations are being included in all new contracts and master agreements in the US, the UK and Sweden – our three main business hubs where over 80% of our suppliers are based, and last year we extended the geographic reach to other countries where we have major marketing, manufacturing or research activities. These include Japan, China, India, Canada, Mexico and Puerto Rico, as well as more countries in Europe.

#### Monitoring performance

Our supplier evaluation procedure requires that comprehensive on-site audits of all our high-risk category suppliers be conducted at least once every four years. Medium risk suppliers are audited at the start of the business relationship and refresher audits are planned if there are any significant changes at the supplier. The auditing process will be further extended to regional and local suppliers in 2009.

In 2008, our audit programme covered 28 manufacturing sites at 27 different global suppliers. These audits included elements of safety, health, environment, corporate responsibility and security of supply. High-risk categories such as active pharmaceutical ingredients, formulation and packaging, and complex chemicals were a particular focus.

Within the scope of the audit programme, a critical deficiency in a known high risk R&D-area (hydrogenation) was identified at a proposed supplier. The supplier acknowledged the audit feedback, de-commissioned the facility and replaced it with a facility of an appropriate standard.

During the year, we updated our supplier evaluation process to include product security, comprising elements such as information security, logistics and waste handling related to packaging operations. We have also strengthened the social elements of the evaluation process in recent years, particularly in relation to human rights and labour standards, given our expanding presence in Emerging Markets.

Audit training continued during the year, with nine more people joining the audit team. We also conducted a focused 'Ethical Auditing' auditor-training programme as a part of the implementation of the new supplier evaluation process. Training will continue during 2009.

## PRINCIPAL RISKS AND UNCERTAINTIES

The pharmaceutical sector is inherently risky and a variety of risks and uncertainties may affect our business. Here we summarise, under the headings Industry/Economic Environment Risks; Legal/Compliance/Regulatory Risks; and Business Execution Risks, the principal risks and uncertainties that we currently consider may have a significant effect on our financial condition, results of operations and/or reputation. These risks are not listed in any assumed order of priority. Other risks, unknown or not currently considered material, could have a similar effect. We believe the forward-looking statements about AstraZeneca in this Report, identified by words such as 'anticipates', 'believes', 'expects' and 'intends', are based on reasonable assumptions. However, forward-looking statements involve inherent risks and uncertainties such as those summarised below, and may be influenced by factors beyond our control and/or may have actual outcomes materially different from our expectations.

### INDUSTRY/ECONOMIC ENVIRONMENT RISKS

#### Expiration of patents or marketing exclusivity

Pharmaceutical products or diagnostic or medical devices are normally only protected from competition from copying during the period of patent protection or marketing exclusivity. Following patent protection or marketing exclusivity expiry the product is generally open to competition from generic copies. Products under patent protection or having marketing exclusivity generally generate significantly higher revenues than those not protected by patents or marketing exclusivity.

#### Patent litigation and early loss of patents, marketing exclusivity or trademarks

Generic drug manufacturers are seeking to market generic versions of many of our more important products, prior to the expiration of our patents and marketing exclusivity periods. For example, we are currently facing challenges from multiple generic manufacturers to certain of our patents for *Nexium*, *Seroquel* and *Crestor*, some of our best-selling products in the US, our largest market. If such challenges are successful and generic products are launched, or launched 'at risk' on the expectation that challenges to our intellectual property will be successful, this may have a materially adverse effect on our financial condition and results of operations. US sales for *Nexium* in 2008 were \$3,101m, for *Seroquel* were \$3,015m and for *Crestor* were \$1,678m. The more significant patent

litigation relating to our products is described in Note 25 to the Financial Statements. In addition, the research-based pharmaceutical industry may exert intellectual property rights against other research-based companies and there continues to be examples of this. In the case of litigation both with generic manufacturers and other research-based companies, we expect that the greatest challenges will be focused on the most valuable products. Although we vigorously defend our intellectual property rights we cannot be certain we will be successful.

There is the risk that we may be found to infringe the patents of others, and managing such disputes can be costly. We may be liable for damages or royalties, have to obtain costly licences or stop manufacturing, using or selling our products. This risk may be greater in respect of biologics and vaccines where intellectual property protection is sometimes not so clear. In the event of such risks arising we may mitigate them through, for example, acquiring licences or making modifications to cease the infringement and permit commercialisation of our products.

Any of our currently patented products may be the subject of intellectual property litigation or other disputes involving patent offices, anti-trust authorities, other government or law enforcement agencies. Despite our efforts to establish and defend robust patent protection, we may not succeed in such litigation or disputes or be able to mitigate the risk through, for example: obtaining a licence to any third party patent on commercially reasonable terms; successfully developing non-infringing alternatives on a timely basis; or licensing alternative non-infringing technology, if any exists, on commercially reasonable terms. If we were not successful during the patent protection or data exclusivity periods in maintaining exclusive rights to market one or more of our major products, particularly in the US where we have our highest revenue and margins, our revenue and margins would be significantly adversely affected.

In addition to the challenges to our patented products from manufacturers of generic or other patented pharmaceutical products, there is a risk that some countries, particularly some of those in the developing world, may seek to impose limitations on the availability of patent protection for pharmaceutical products, or on the extent to which such protection may be obtained and/or enforced, within their jurisdictions. As a result, generic manufacturers in these countries may be increasingly and more easily able to introduce

competing products to the market earlier than they would have been able to, had the patent protection been available.

Combined with patent protection and other types of marketing exclusivity, products protected by a valid trademark usually generate higher revenues than those without a trademark. We believe that we have robust trademark protection for our products but cannot be certain that we would be able to defend any challenge successfully.

#### Expiration or earlier loss of patents covering competing products

The expiration or earlier loss of patents covering others' branded products may lead to the availability of generic products earlier than anticipated, which could have a materially adverse effect on our financial condition and results of operations. For example, the loss/expiry of patent rights covering major products in the US, such as *Lipitor*™ or *Advair Diskus*™ after 2012 may adversely affect growth of our still patented products in that market.

#### Failure to obtain patent protection

Our policy is to protect our investment in R&D by applying for appropriate intellectual property protection in respect of our inventions and innovations; this is a key business priority. Our ability to obtain patents and other proprietary rights in relation to our products is, therefore, an important element of our ability to create long-term value for the business.

Many of the different countries in which we operate are developing their patent laws for pharmaceuticals and there is more uncertainty regarding the patent protection available now and in the future than in countries with well developed intellectual property regimes. Limitations on the availability of patent protection in certain developing countries could have an adverse effect on the pricing and sales of our products and, consequently, could adversely affect our revenues from them. More information about protecting our intellectual property is contained in the Intellectual Property section on page 26.

#### Impact of fluctuations in exchange rates

As a global business, currency fluctuations can significantly affect our results of operations, which are accounted for in US dollars. Approximately 47% of our 2008 sales were in North America (US and Canada) with a significant proportion of that figure being in respect of US sales, which is expected to remain our largest single market. Sales in certain other countries are also in US dollars, or in currencies whose exchange rates are linked to the US dollar. Major components of

our cost base are, however, located in Europe, where an aggregate of approximately 51% of our employees are based. Movements in the exchange rates used to translate foreign currencies into US dollars may, therefore, have a materially adverse effect on our financial condition and results of operations.

Certain of our subsidiaries import and export goods and services in currencies other than their own working currency. The results of such subsidiaries could, therefore, be affected by currency fluctuations arising between the transaction dates and the settlement dates for those transactions. We hedge these exposures through financial instruments. The fair value of financial instruments used to hedge these exposures, principally forward foreign exchange contracts, at 31 December 2008 was \$95 million.

We have policies that seek to mitigate the effect of exchange rate fluctuations on the value of foreign currency cash flows and in turn their effects on the results of the Group, but we do not seek to remove all such risks. Further information is contained in Financial Risk Management Policies on pages 120 to 121. In general, a unilateral strengthening of the US dollar adversely affects our reported results whereas a weakening of the US dollar is generally favourable.

#### **Debt-funding arrangements**

We incurred substantial debt in connection with the acquisition of MedImmune, Inc.. Our debt could affect our business flexibility and requires us to devote cash resources to service interest and principal payments. Our current debt level could limit our ability to engage in additional transactions or incur additional indebtedness and could potentially affect our investment grade credit rating. Further information is contained in Financial Risk Management Policies on pages 41 to 42.

#### **Bad debts**

The Group sells to a large number of customers, across many countries, ranging from government backed agencies and large private wholesalers to privately owned pharmacies. An economic slowdown may impact the ability of some of these customers to continue to trade, which in turn may result in losses from writing these debts off. Although risk management processes are in place to manage this risk, and provisions are established for debts that may not be recoverable we cannot be certain that there will not be further losses above those already provided for. Further information is contained in the Financial Review on page 42.

#### **Adverse impact of a sustained economic downturn**

A variety of significant risks may arise from a sustained global economic downturn including those referred to here. Additional pressure from governments and other healthcare payers on medicine prices and volume of sales in response to recessionary pressures on budgets may cause a slow down or decline in growth in some markets. In addition, suppliers of some of the key goods and services we rely upon may cease to trade. The consequence of this may be significant delays and/or difficulties obtaining goods and services on commercially acceptable terms or even at all. We seek to mitigate these risks as described in the Supply and Manufacturing section on page 27.

Moreover, the high fixed costs of operating a global research-based pharmaceuticals business and the long and uncertain development cycles for our products mean that we are highly dependant on being able to access a sustainable flow of liquid funds. In a sustained and/or severe economic downturn financial institutions who hold our cash and other short-term deposits may cease to trade and there can be no guarantee that depositors/investors will be able to access their assets without a protracted, expensive and uncertain process, if at all. Although we have adopted conservative cash management and treasury policies to mitigate this risk (further information of which is contained in Financial Risk Management Policies on pages 41 to 42) we cannot be certain that these will be completely effective should a number of major financial institutions cease to trade. Additionally, if we need access to external sources of financing to sustain and/or grow our business, such as may be available via the debt or capital financial markets, this may not be available on commercially acceptable terms, or at all, in the event of a severe and/or sustained economic downturn.

A particular risk relates to the Group's pension obligations, the single largest of which is the UK Pension Fund. The obligations are backed by assets invested across the broad investment market. Sustained falls in these assets will put a strain on funding resulting in requirements for additional cash, which may restrict our ability to grow the business in line with our strategic objectives. Similarly, if the liabilities rise, for example due to continued, sustained improvements in longevity, or falls in the corporate bond spreads that drive discount rates for accounting valuations, there will be a strain on funding. The likely increase in the IAS19 accounting deficit generated by any of these may cause the

ratings agencies to review our credit rating, with the potential to impact our ability to raise debt to fund further externalisation.

#### **Owning and operating a biologics and vaccines business**

As we continue to expand our biologics capabilities, the risks related to owning and operating a biological products business are becoming more important to the Group. Some of the more significant of these risks are described below:

- > We may have limited access to and/or supply of biological materials, such as cells or animal products or by-products. In addition, government regulations in multiple jurisdictions could result in restricted access to, use or transport of such materials. Loss of access to sufficient sources of such materials, or tighter restrictions on the use of such materials may interrupt or prevent our research activities as planned and/or increase our costs.
- > The development, manufacturing and marketing of biological products are often subject to more complex and stringent regulations than those applicable to other pharmaceutical products. As a result, the production and release schedules for biological products may be more significantly affected by the regulatory process than for other products. In addition, various legislative and regulatory authorities are considering whether an abbreviated approval process is appropriate for biosimilars or follow-on biological products (similar versions of existing biological products). It is uncertain as to when, or if, any such process may be adopted or how such a process would relate to intellectual property rights in connection with marketed or pipeline biological products, but any such process could have a material effect on the future commercial prospects for patented biological products.
- > Manufacturing biological products, especially in large quantities, is often complex and may require the use of innovative technologies to handle living micro-organisms. Manufacturing biological products requires facilities specifically designed and validated for this purpose, with sophisticated quality assurance and quality control procedures. Slight deviations in any part of the manufacturing process may result in lot failure, product recalls or spoilage, for example due to contamination.

> The methods of distributing and marketing biological products could have a material impact on the revenue we are able to generate from the sales of products such as *Synagis* and *FluMist*.

The commercialisation of biologic products is often more complex than for traditional pharmaceutical products. This is primarily due to differences in mode of administration, technical aspects of the product, and the rapidly changing distribution and reimbursement environments. The tools available to the commercial team can be more limited and time-consuming in that the target physicians who prescribe biologics are often hospital-based specialists who treat patients with rare diseases. Biologics sales forces are usually smaller, more targeted and typically are required to make a more detailed, data-driven sales call. Patient education and awareness also requires a more personalised approach in that broad-based awareness campaigns, such as direct-to-consumer advertising in the US, is often not an efficient means by which to reach a smaller target population.

#### **Competition, price controls and price reductions**

Some of our most valuable products compete directly with other products marketed either by major R&D based prescription pharmaceutical companies or by generic pharmaceutical manufacturers. These competitors may invest greater resources to the marketing of their products than we do depending on the relative priority of these competitor products within their company's portfolio. Generic versions of products are often sold at lower prices because they do not have to recoup the significant cost of R&D investment, nor do they generally invest the same amounts in education services for healthcare professionals. Industry consolidation has resulted in a small number of very large companies, some of which have acquired generic businesses. This trend, if it continued, could adversely affect our competitive position, whilst consolidation among our customers may increase price pressures. Some of our patented products, including *Nexium*, *Crestor*, *Seroquel* and *Symbicort* are subject to price pressure from competition from generic products in the same product class.

In most of our key markets there is continued economic, regulatory and political pressure to limit or reduce the cost of pharmaceutical products. A summary of the principal aspects of price regulation and how price pressures are affecting our business in our most important markets is set out in the Geographical Review from page 48.

In the US realised prices are being depressed through limited lists, or formularies, that may force manufacturers either to reduce prices or be excluded from the list, and as a consequence lose sales revenue from patients covered by that formulary. In addition, private health insurance companies and employers that self-insure increasingly require co-payments from beneficiaries, particularly for branded pharmaceuticals and biotechnology products, among other reasons, to encourage beneficiaries to use generic products. The increased use of strict formularies by institutional customers in response to the current cost-containment environment and increasingly restrictive reimbursement policies could result in a materially adverse effect on our financial condition and results of operations.

In the EU, efforts by the European Commission to reduce inconsistencies and improve standards and best practice in the disparate national regulatory systems have met with little immediate success. The industry is, therefore, exposed to greater application of reference pricing mechanisms and ad hoc national cost-containment measures on prices and the consequent cross-border movement of products. The importation of pharmaceutical products from countries where prices are low due to government price controls or other market dynamics, to countries where prices for those products are higher, may increase. The accession of additional countries from Central and Eastern Europe to the EU as well as economic changes within EU countries may result in significant increases in the parallel trading of pharmaceutical products. In the US, new legislation is possible that may allow the commercial importation of drugs into the US from selected countries. The adoption of such legislation could result in an increase in volume of cross-border product movements which could result in a materially adverse effect on our financial condition and results of operations.

We expect that pressures on pricing will continue and may increase. Because of these pressures, there can be no certainty that we will be able to charge prices for a product that, in a particular country or in the aggregate, enable us to earn an adequate return on our investment in that product.

#### **Taxation**

The integrated nature of our worldwide operations can produce conflicting claims from revenue authorities as to the profits to be taxed in individual territories. The resolution of these disputes can result in a reallocation of profits between jurisdictions and an increase or decrease in related tax costs, and has

the potential to affect our cash flows and earnings per share. Claims, regardless of their merits or their outcome, are costly, divert management attention, and may adversely affect our reputation.

The majority of the jurisdictions in which we operate have double tax treaties with other foreign jurisdictions, which enable us to ensure that our revenues and capital gains do not incur a double tax charge. If any of these double tax treaties should be withdrawn or amended, especially in a territory where a member of the Group is involved in a taxation dispute with a tax authority in relation to cross-border transactions, such withdrawal or amendment could have a materially adverse effect on our financial condition and results of operations, as could a negative outcome of a tax dispute or failure of tax authorities to agree through competent authority proceedings. See the Financial Risk Management Policies on pages 41 to 42 for further details of risk mitigation. The Group is currently managing a number of tax disputes detailed in Note 25 to the Financial Statements.

#### **Substantial product liability claims**

Given the widespread impact that prescription drugs may have on the health of large patient populations, pharmaceutical, biopharmaceutical and medical device companies have, historically, been subject to large product liability damages claims, settlements and awards for injuries allegedly caused by the use of their products. Product liability claims, regardless of their merits or their outcome, are costly, divert management attention, and may adversely affect our reputation and demand for our products. Adverse publicity relating to the safety of a product or of other competing products may increase the risk of product liability claims. Litigation, particularly in the US, is inherently unpredictable and verdicts and/or unexpectedly high awards of damages can result. Substantial product liability claims that result in court decisions against us or in the settlement of proceedings could have a materially adverse effect on our financial condition and results of operations, particularly where such circumstances are not covered by insurance. We are currently subject to extensive product liability litigation in relation to *Seroquel*, and further details about this and all material legal proceedings in which we are involved are set out in Note 25 to the Financial Statements. Information about our approach to patient safety is set out in the Medicines section on page 16.

### Performance of new products

Although we carry out numerous and extensive clinical trials on all our products before they are launched, for a new product it can be difficult, for a period following its launch, to establish from available data a complete assessment of its eventual efficacy and/or safety in broader clinical use on the market. Due to the relatively short time that a product has been tested and the relatively small number of patients who have taken the product, the available data may be immature. Simple extrapolation of the data may not be accurate and could lead to a misleading interpretation of a new product's likely future commercial performance.

The successful launch of a new pharmaceutical product involves a substantial investment in sales and marketing costs, launch stocks and other items. The commercial success of our new medicines is of particular importance to us in order to replace sales lost as and when patent protection ceases in established markets. If a new product does not succeed as anticipated or its rate of sales growth is slower than anticipated, there is a risk that the costs incurred in launching it could have a materially adverse effect on our financial condition and results of operations. In addition, for launch of products that are seasonal in nature, delays for regulatory approval or manufacturing difficulties can have the effect of delaying launch to the next season and significantly reduce the value of costs spent in preparing for the launch for that season.

### Environmental/occupational/health and safety liabilities

We have environmental liabilities at some currently or formerly owned, leased and third party sites, as described in more detail in Note 25 to the Financial Statements. These liabilities are carefully managed by designated technical, legal and business personnel and there is no reason for us to believe that associated current and expected expenditure and/or risks are likely to have a materially adverse effect on our financial condition and results of operations as a general matter, although they could, to the extent that they exceed applicable provisions, have a materially adverse effect on our financial condition and results of operations for the relevant period. In addition, a change in circumstances (including a change in applicable laws or regulations) may result in such an effect.

Nonetheless, a significant non-compliance or incident for which we were responsible could result in us being liable to pay compensation, fines or remediation costs. In some circumstances, such liability could have a materially adverse effect on our financial condition, reputation and results of operations. In addition, our financial provisions for any obligations that we may have relating to environmental liabilities may be insufficient if the assumptions underlying the provisions – including our assumptions regarding the portion of waste at a site for which we are responsible – prove incorrect, or if we are held responsible for additional contamination.

### Developing our business in emerging markets

The development of our business in emerging markets may be a critical factor in determining our future ability to sustain or increase the level of our global product revenues. Challenges that arise in relation to the development of the business in emerging markets include, but are not limited to, more volatile economic conditions, competition from companies that are already present in the market, the need to identify correctly and leverage appropriate opportunities for sales and marketing, poor protection of intellectual property, inadequate protection against crime (including counterfeiting, corruption and fraud) (further details of which can be found below), inadvertent breaches of local law/regulation and not being able to recruit sufficient personnel with appropriate skills and experience. The failure to exploit potential opportunities appropriately in emerging markets may have a materially adverse effect on our financial condition and results of operations. Information on the risks associated with the failure to obtain patent protection can be found above.

### Product counterfeiting

Counterfeit medicines may contain harmful substances, the wrong dose of the active pharmaceutical ingredient (API) or no API at all. Counterfeit medicines are a danger to patients in all parts of the world; the International Medical Products Anti-Counterfeiting Taskforce (IMPACT) of the World Health Organization (WHO) estimates that approximately 10% to 30% of medicines in emerging economies are counterfeit, with parts of Latin America, Asia and Africa having a greater percentage than that. By contrast, in developed countries with effective regulatory systems, counterfeits represent less than 1% of the market.

Public loss of confidence in the integrity of pharmaceutical products as a result of counterfeiting could adversely affect our reputation and financial performance. In addition, undue or misplaced concern about the issue might induce some patients to stop taking their medicines, with consequential risks to their health.

We use a range of measures against counterfeit medicines, and continue to develop our capabilities in this area. These include introducing technologies that make it more difficult for counterfeiters to copy our products; conducting market surveillance and monitoring the supply chain to identify potential counterfeiting operations; and responding rapidly to any reports of counterfeit AstraZeneca medicines, working with regulators, healthcare professionals, distributors, law enforcement agencies and other organisations to protect patient interests. We also participate in a variety of anti-counterfeiting forums in the public and private sector, including the WHO's IMPACT working group and the Pharmaceutical Security Institute.

### LEGAL/COMPLIANCE/REGULATORY RISKS

#### Adverse outcome of litigation and/or government investigations and insufficient insurance coverage

Note 25 to the Financial Statements includes information about legal proceedings in which we are currently involved. Unfavourable resolution of these and similar future proceedings, including government investigations, competition and anti-trust enquiries, investigations and litigation, product liability litigation and securities class action law suits, may have a materially adverse effect on our financial condition and results of operations, not least because we may be required to make significant provisions in our accounts related to legal proceedings and/or governmental investigations, which would reduce earnings. In many cases, particularly in the US, the practice of the plaintiff bar is to claim damages – compensatory, punitive and statutory – in extremely high amounts. Accordingly, it is difficult to quantify the potential exposure to claims in proceedings of the type referred to in Note 25 to the Financial Statements.

Recent insurance loss experience in the pharmaceutical industry, including product liability exposures, has increased the cost of, and narrowed the coverage afforded by, pharmaceutical companies' product liability insurance. In order to contain insurance costs in recent years, we have continued to adjust our coverage profile, accepting a greater degree of uninsured exposure. The Group

has not held product liability insurance since February 2006. In addition, where claims are made under insurance policies, insurers may reserve the right to deny coverage on various grounds. If such denial of coverage is ultimately upheld, this could result in material additional charges to our earnings.

#### **Difficulties of obtaining and maintaining regulatory approvals for new products**

We are subject to strict controls on the manufacture, labelling, distribution and marketing of pharmaceutical products. The requirement to obtain regulatory approval based on a product's safety, efficacy and quality before it may be marketed for a specified therapeutic indication or indications in a particular country, and to maintain and to comply with licences and other regulations relating to its manufacture, are particularly important. The submission of an application to regulatory authorities (which are different, with different requirements, in each region or country) may or may not lead to approval to market the product. Regulators can refuse to grant approval or may require additional data before approval is given, even though the medicine may already be launched in other parts of the world. The countries that constitute key markets for our pharmaceutical products include the US, the countries of the EU and Japan. The approval of a product is required by the relevant regulatory authority in each country, although a single pan-EU marketing authorisation approval can be obtained through a centralised procedure.

In recent years, regulatory authorities and sponsor companies have been under increased public pressure to apply more conservative benefit/risk criteria before a pharmaceutical product is approved. In addition, third party interpretation of publicly available data on our marketed products has the potential to influence the approval status or labelling of a currently approved and marketed product. Further, predicting when a product will be approved for marketing remains challenging. For example, a review of the FDA performance data indicates that for new drug and biologic applications approved in 2008, the average review time (ie the time from submission to approval) increased markedly from 2007, in part due to the FDA failing to meet the review time targets for new drug applications specified under the Prescription Drug User Fee Act IV. Delays in regulatory reviews could impact the timing of new product launch.

#### **Failure to observe continuing regulatory oversight**

Once a product has been approved for marketing by regulatory authorities, it is subject to continuing control and regulation, such as the manner of its manufacture, distribution, marketing and safety surveillance. In addition, the facilities in which products are produced are subject to continuing inspections, and minor changes in manufacturing processes may require additional regulatory approvals, either of which could result in us having to incur significant additional costs. Regulatory authorities have wide-ranging administrative powers to deal with any failure to comply with continuing regulatory oversight (and this could affect us whether such failure is our own or that of third parties with which we have relationships). These powers include withdrawal of a marketing approval previously granted, product recalls, seizure of products, closure of manufacturing sites and other sanctions for non-compliance. Regulatory sanction, following a failure to comply with such continuing regulatory oversight, could have a materially adverse effect on the conduct of our business, our financial condition and results of operations. In addition, because our products are intended to promote the health of patients, any supply interruption could lead to allegations that public health has been endangered, and could lead to legal proceedings being filed against us, damage to our reputation and loss of confidence in our products.

#### **BUSINESS EXECUTION RISKS**

##### **Challenges to achieving commercial success of new products**

The development of new products is complex and involves the commitment of substantial effort, funds and other R&D resources. It involves a high degree of risk and uncertainty and can take many years. New products are important to replace the declining sales of older products following expiry of intellectual property protection. Our development of any product candidate may fail at any stage of the process, and we may ultimately be unable to achieve commercial success for any number of reasons, including:

- > Failure to obtain the required regulatory approvals for the product candidate or the facilities in which it is manufactured.
- > Adverse reactions to the product candidate or indications of other safety concerns.

- > Inability to manufacture sufficient quantities of the product candidate for development or commercialisation activities in a timely and cost-efficient manner.
- > Unfavourable data from key studies.
- > Excessive costs of, or difficulty in, manufacturing.
- > Erosion of patent term and other intellectual property rights, and infringement of those rights and the intellectual property rights owned by third parties.
- > Failure to show value or a differentiated profile for our products.

As a result, we cannot be certain that compounds currently under development will achieve success. There can also be no guarantee that new products in the pipeline will achieve market success or come to market before the expiration of our patents or the erosion of our current product brands. Furthermore, a succession of negative drug project results and a failure to reduce development timelines effectively could adversely affect the reputation of our R&D capabilities. The failure of R&D to yield new products that achieve commercial success may have a materially adverse affect on our financial condition and results of operations.

#### **Acquisitions and strategic alliances formed as part of our externalisation strategy may be unsuccessful**

We seek acquisitions of complementary businesses, technology licensing arrangements, strategic alliances and collaborations to expand our product portfolio and geographical presence as part of our business strategy. Examples of such recent strategic acquisitions, arrangements, collaborations and alliances include:

- > Acquisition of MedImmune to accelerate our biologics capability.
- > Collaboration with Bristol-Myers Squibb Company to develop and commercialise two investigational compounds being studied for the treatment of Type 2 diabetes, saxagliptin and dapagliflozin.
- > Collaboration with POZEN Inc. to develop a fixed dose combination of enteric coated naproxen and immediate release esomeprazole for chronic pain (PN400), utilising POZEN's proprietary technology.

- > Agreement with Abbott for the development of Abbott's next-generation fenofibrate (ABT-335) and Crestor in a single pill, fixed-dose combination treatment to target all three major blood lipids – LDL-C 'bad cholesterol', HDL-C 'good cholesterol' and triglycerides.
- > Collaboration deals with Columbia University and Newcastle University to support our early stage discovery activities.

We may not complete these types of transactions or collaborative projects in a timely manner, on a cost-effective basis, or at all, and may not realise the expected benefits of any acquisition, licensing arrangement or strategic alliance. Other companies may also compete with us for these opportunities. The success of such current and future arrangements is largely dependent on the technology and other intellectual property we acquire and the resources, efforts and skills of our partners. Disputes and difficulties in such relationships may arise, often due to conflicting priorities or conflicts of interest which may erode or eliminate the benefits of these alliances if, for example, the agreements are terminated; insufficient financial or other resources are made available to the alliances; intellectual property is negatively impacted; obligations are not performed as expected; controls and commercial limitations are imposed over the marketing and promotion of products to be co-developed; or challenges in achieving commercial success of the product are encountered during the development process. Also, under many of our strategic alliances, we make milestone payments well in advance of commercialisation of products, with no assurance that we will ever recoup those payments. If these types of transactions are unsuccessful, this may have an adverse effect on our financial condition and results of operations.

In addition, integration of an acquired business could involve incurring significant debt and unknown or contingent liabilities, as well as having a negative effect on our reported results of operations from acquisition-related charges, amortisation of expenses related to intangibles and charges for impairment of long-term assets. These effects, individually or in combination, could cause a deterioration of our credit rating, increased borrowing costs and interest expense. We could also experience difficulties in integrating geographically separated organisations,

systems and facilities, and personnel with different organisational cultures. Integration of an acquired business may also divert management resources that would otherwise be available for continuing development of our existing business. The integration process may result in business disruption, the loss of key employees, slower execution of various work processes, compliance failures due to a change in applicable regulatory requirements and other issues such as a failure to integrate information technology and other systems (further details of the risks associated with information technology and outsourcing can be found below).

#### **Reliance on third parties for supplies of materials and services**

Like most, if not all, major research-based pharmaceutical companies we increasingly rely on third parties for the timely supply of specified raw materials, equipment, contract manufacturing, formulation or packaging services and maintenance services that are key to our operations. We actively manage these third party relationships to ensure continuity of supplies on time and to our required specifications. However, events beyond our control could result in the delayed, incomplete or failure of supplies, which could have a materially adverse effect on our financial condition and results of operations. Recently, we have established sourcing centres in China and India to identify high quality suppliers in those regions. Further information is contained in the Working with Suppliers section on page 75.

#### **Failure to manage a crisis**

We handle chemical and biological materials, operate research and manufacturing plants and distribute products worldwide. Major disruption to our business and damage to our reputation may be triggered by an operational incident or actions by third parties. In these circumstances, a plan for addressing operational and other issues should ensure a timely response and the ability to resume business as usual. Failure to institute proper communication to internal and external stakeholders and mobilise a rapid operational response could have a materially adverse effect on our financial condition and results of operations. Further information about our business resilience plans and processes are contained in the Business Resilience Plans section on page 75.

#### **Delay to new product launches**

Our continued success depends on the development and successful launch of innovative new drugs. The anticipated launch dates of major new products have a significant impact on a number of areas of our business, including investment in large clinical trials, the manufacture of pre-launch stocks of the products, investment in marketing materials ahead of a product launch, sales force training and the timing of anticipated future revenue streams from commercial sales of new products. These launch dates are primarily driven by the development programmes that we run and the demands of the regulatory authorities in the approvals process, as well as pricing negotiation in some countries. Delays in anticipated launch dates can arise as a result of adverse findings in pre-clinical or clinical studies, regulatory demands, competitor activity and technology transfer. Any delay to the anticipated launch dates may therefore impact our business and operations in a number of ways. Significant delay to the anticipated launch dates of new products could have a materially adverse effect on our financial condition and results of operations.

#### **Failure of information technology and outsourcing**

We are dependent on effective information technology (IT) systems. These systems support key business functions such as our R&D and manufacturing capabilities, and are an important means of internal communication and communication with customers and suppliers. Any significant disruption of these IT systems or the failure of new IT systems to integrate with existing IT systems could materially and adversely affect our operations. We also have a number of outsourcing arrangements in respect of critical processes, services and the support of our IT infrastructure and our increasing dependency on these outsource providers could impact on our ability to deliver on business targets and to maintain our compliance status and reputation. Risk associated with outsource providers is mitigated by our contracting approach which enables us to monitor closely any degradation in services and enact staged remedies. Our engagement of multiple outsource providers mitigates against risk of over-reliance on any one outsource provider.

**Productivity initiatives**

We are implementing various productivity initiatives and restructuring programmes, with the aim of enhancing the long-term efficiency of the business. However, the anticipated cost savings and other benefits are based on preliminary estimates and the actual savings may vary significantly. In particular, these cost reduction measures are based on current conditions and do not take into account any future changes to the pharmaceutical industry or our operations, including new business developments, wage and price increases and other factors. If inappropriately managed the expected value of the initiative can be lost through low employee morale and hence productivity, increased absence levels and industrial action. Our failure to implement successfully these planned cost reduction measures, either through the successful conclusion of employee relations processes (including consultation and engagement, talent management and recruitment and retention), or the possibility that these efforts do not generate the level of cost savings we anticipate, could have a materially adverse effect on our financial condition, results of operations and reputation. See the People section on page 28 for information about mitigating the risk of significant business change.

# BUSINESS ORGANISATION AND CORPORATE GOVERNANCE

## BUSINESS ORGANISATION

This section describes in broad terms how the Company is organised in terms of the overall structure and principal roles and responsibilities of the Board, its committees and other significant bodies such as the Senior Executive Team (SET) and the R&D Executive Committee.

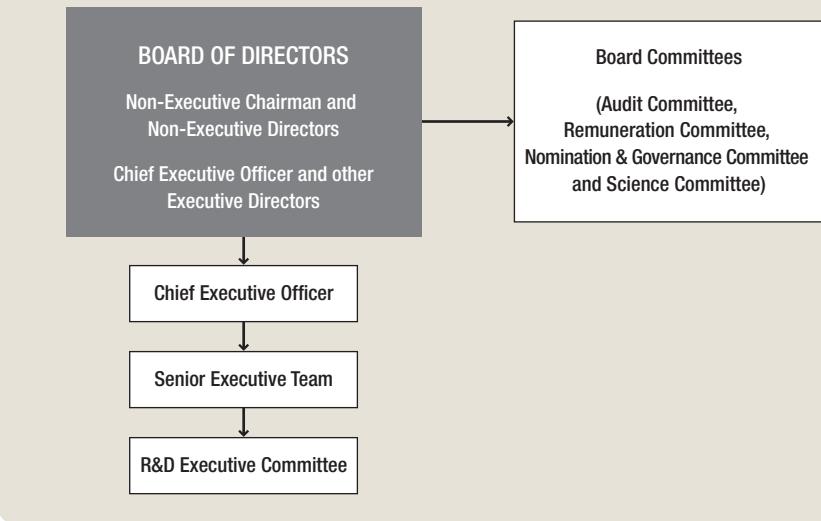
### ASTRAZENECA PLC BOARD COMPOSITION, PROCESSES AND RESPONSIBILITIES

The Board comprises three Executive Directors (two from April 2009 when John Patterson's retirement takes effect) and 11 Non-Executive Directors. The membership of the Board at 31 December 2008, and information about individual Directors is contained in the Board of Directors section on pages 84 and 85.

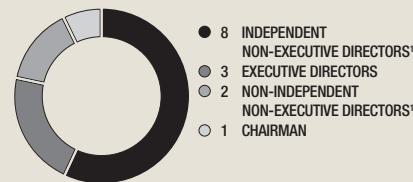
All Directors are collectively responsible for the success of the Company. The Non-Executive Directors have a responsibility to bring independent, objective judgement to bear on Board decisions, which includes constructively challenging management and helping to develop the Company's strategy as well as scrutinising the performance of management. The Non-Executive Directors also have various responsibilities concerning the integrity of financial information, internal controls and risk management.

At the end of every Board meeting, the Company's Non-Executive Directors meet without the Executive Directors present in order to review and discuss any matters that have arisen during the meeting and/or such other matters as may appear to the Non-Executive Directors to be relevant to them in properly discharging their duties independently. To ensure the Board has good visibility of the key operating decisions of the business, members of the SET routinely attend Board meetings on a rotational basis and the Board regularly meets and consults other senior employees throughout the year.

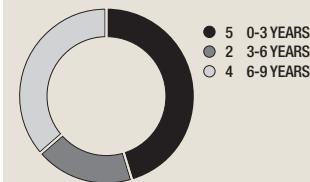
## BOARD AND SENIOR MANAGEMENT



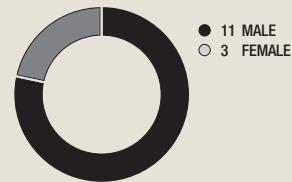
## BALANCE OF NON-EXECUTIVE DIRECTORS AND EXECUTIVE DIRECTORS



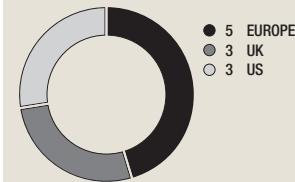
## LENGTH OF TENURE OF NON-EXECUTIVE DIRECTORS



## GENDER SPLIT OF DIRECTORS



## GEOGRAPHICAL MIX OF NON-EXECUTIVE DIRECTORS



<sup>1</sup> As determined by the Board in accordance with the UK Combined Code.

## 84 BOARD OF DIRECTORS AT 31 DECEMBER 2008



**LOUIS SCHWEITZER (66)**  
Non-Executive Chairman,  
Chairman of the Nomination  
and Governance Committee and  
Member of the Remuneration Committee



**DAVID BRENNAN (55)**  
Executive Director and  
Chief Executive Officer



**SIMON LOWTH (47)**  
Executive Director and  
Chief Financial Officer



**MARCUS WALLENBERG (52)**  
Non-Executive Director



**JOHN VARLEY (52)**  
Non-Executive Director,  
Chairman of the Remuneration Committee  
and Member of the Nomination and  
Governance Committee



**JOHN BUCHANAN (65)**  
Non-Executive Director,  
Chairman of the Audit Committee and  
Member of the Remuneration Committee



**JOHN PATTERSON CBE FRCP (60)**  
Executive Director, Development and  
Member of the Science Committee



**HÅKAN MOGREN KBE (64)**  
Non-Executive Deputy Chairman and  
Member of the Nomination and  
Governance Committee



**MICHELE HOOPER (57)**  
Senior Non-Executive Director,  
Member of the Audit Committee and the  
Nomination and Governance Committee



**DAME NANCY ROTHWELL (53)**  
Non-Executive Director,  
Chairman of the Science Committee and  
Member of the Remuneration Committee



**JANE HENNEY (61)**  
Non-Executive Director,  
Member of the Audit Committee,  
the Nomination and Governance  
Committee and the Science Committee



**BO ANGELIN (59)**  
Non-Executive Director and  
Member of the Science Committee



**JEAN-PHILIPPE COURTOIS (48)**  
Non-Executive Director and  
Member of the Audit Committee



**RUDY MARKHAM (62)**  
Non-Executive Director and  
Member of the Audit Committee

Other officers of the Company at 31 December 2008 included members of the Senior Executive Team, as set out on page 86. John Patterson will retire from the Board on 31 March 2009.

Adrian Kemp was appointed Company Secretary with effect from 1 January 2009, in succession to Graeme Musker who stepped down at the end of 2008 and will retire from the Company in April 2009.

**LOUIS SCHWEITZER**

Appointed as a Director 11 March 2004. Non-Executive Chairman of Renault SA since April 2005. Chairman and Chief Executive Officer of Renault SA 1992-2005. Non-Executive Director of BNP-Paribas, Veolia Environnement, Volvo AB and L'Oréal.

**DAVID BRENNAN**

Appointed as a Director 14 March 2005. Appointed Chief Executive Officer 1 January 2006. Chairman-elect of the Executive Board of the Pharmaceutical Research and Manufacturers of America (PhRMA) (to take effect on 3 April 2009). Honorary Board Member of the US CEO Roundtable on Cancer, Board Member of the European Federation For Pharmaceutical Industries and Associations (EFPIA). Commissioner of the UK Commission for Employment and Skills (UKCES). Chairman of the Board of the Southeastern Chapter of the American Heart Association 2004-2006.

**SIMON LOWTH**

Appointed as a Director 5 November 2007. Also has overall responsibility for Information Services. Finance Director, Scottish Power plc 2005-2007 and Executive Director, Corporate Strategy and Development, Scottish Power plc 2003-2005. Director – Head of UK Industrial Practice, McKinsey & Company 2000-2003.

**MARCUS WALLENBERG**

Appointed as a Director 6 April 1999. Formerly a Director of Astra AB (appointed 18 May 1989). Chairman of Skandinaviska Enskilda Banken AB. Chairman of AB Electrolux. Chairman of SAAB AB. Vice-Chairman of Telefonaktiebolaget L M Ericsson. Non-Executive Director of Stora Enso Oyj, the Knut and Alice Wallenberg Foundation and Temasek Holdings Ltd. Honorary Chairman of International Chamber of Commerce.

**JOHN VARLEY**

Appointed as a Director 26 July 2006. Executive Director of Barclays Bank plc and Barclays plc since 1998 and Group Chief Executive since 2004. Chairman of Business Action on Homelessness and President of the Employers' Forum on Disability and member of the International Advisory Panel of the Monetary Authority of Singapore. Honorary President of the UK Drug Policy Commission. Treasurer and Trustee of St. Dunstan's and Trustee of Thornton Smith & Plevins Young People's Trust.

**JOHN BUCHANAN**

Appointed as a Director 25 April 2002. Executive Director and Group Chief Financial Officer of BP p.l.c. 1996-2002. Member of the UK Accounting Standards Board 1997-2001. Senior Independent Director of BHP Billiton Plc. Deputy Chairman of Vodafone Group Plc. Chairman of Smith & Nephew plc. Chairman of International Chamber of Commerce (UK).

**JOHN PATTERSON CBE FRCR**

Appointed as a Director 1 January 2005. Fellow of the Royal College of Physicians. Director of the British Pharma Group. Non-Executive Director of Cobham plc. Non-Executive Director of Amersham plc 2001-2004. President of the Association of the British Pharmaceutical Industry (ABPI) 2002-2004. Member of the Supervisory Board of the UK Medicines Control Agency 1990-1994.

**ÅKAN MOGREN KBE**

Appointed as a Director 6 April 1999. Formerly Chief Executive Officer and a Director of Astra AB (appointed 18 May 1988). Member of the Board of Directors of Investor AB and Groupe Danone. Director of the Marianne and Marcus Wallenberg Foundation. Member of the Royal Swedish Academy of Engineering Sciences.

**MICHELE HOOPER**

Appointed as a Director 1 July 2003. President and Chief Executive Officer of Stadtlander Drug Company 1998-1999. Corporate Vice-President and President, International Businesses of Caremark International Inc. 1992-1998. Non-Executive Director of UnitedHealth Group, PPG Industries, Inc. and Warner Music Group, Inc.

**DAME NANCY ROTHWELL**

Appointed as a Director 27 April 2006. Also has responsibility for overseeing Corporate Responsibility. MRC Research Professor and Deputy President and Deputy Vice Chancellor at the University of Manchester. Council member of the Biotechnology and Biological Sciences Research Council, Vice-President and Council member of the Royal Society. Prior appointments include: Trustee of Cancer Research UK and the Campaign for Medical Progress; Chair of the Research Defence Society; Chair of the Wellcome Trust Public Engagement Strategy Panel; President of the British Neuroscience Association; and Council member of the Medical Research Council.

**JANE HENNEY**

Appointed as a Director 24 September 2001. Currently Professor of Medicine, University of Cincinnati. Prior appointments include: Senior Vice-President and Provost for Health Affairs, University of Cincinnati Medical Academic Health Center; Deputy Director, US National Cancer Institute; Deputy Commissioner for Operations, US Food and Drug Administration (FDA); and Commissioner of Food and Drugs, FDA. Non-Executive Director of AmerisourceBergen Corporation and CIGNA Corporation. Other board appointments include The Commonwealth Fund and China Medical Board.

**BO ANGELIN**

Appointed as a Director 24 July 2007. Professor of Clinical Metabolism at Karolinska Institutet and Head of the Department of Endocrinology, Metabolism and Diabetes at the Karolinska University Hospital in Stockholm, Sweden. Member of the Nobel Assembly and of the Swedish Royal Academy of Sciences. Member of the Medical Nobel Institute. Prior appointments include Chairman of the Nobel Committee for Physiology and Medicine.

**JEAN-PHILIPPE COURTOIS**

Appointed as a Director 18 February 2008. President of Microsoft International since June 2005. CEO Microsoft EMEA 2003-2005. President Microsoft EMEA 2000-2003. Corporate Vice-President, Microsoft Worldwide Customer Marketing 1998-2000. Administrator for PlaNet Finance and representative at the Institut Montaigne.

**RUDY MARKHAM**

Appointed as a Director 12 September 2008. Chairman and Non-Executive Director of Moorfields Eye Hospital Foundation Trust. Non-Executive Director of United Parcel Services Inc., Financial Reporting Council, Standard Chartered PLC and Legal & General plc. Fellow of the Chartered Institute of Management Accountants and Fellow of the Association of Corporate Treasurers.

86 **CHIEF EXECUTIVE OFFICER,  
DELEGATION OF AUTHORITY AND SENIOR EXECUTIVE TEAM**

**SENIOR EXECUTIVE TEAM**



**DAVID BRENNAN**  
Chief Executive Officer



**SIMON LOWTH**  
Chief Financial Officer



**JOHN PATTERSON**  
Executive Director, Development



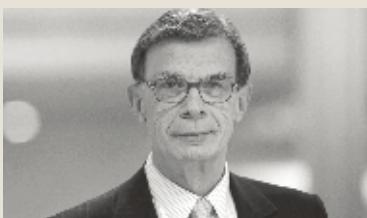
**TONY ZOOK**  
Chief Executive Officer, North America,  
President, MedImmune and Executive  
Vice-President, Global Marketing



**DAVID SMITH**  
Executive Vice-President, Operations



**LYNN TETRAULT**  
Executive Vice-President, Human  
Resources and Corporate Affairs



**BRUNO ANGELICI**  
Executive Vice-President, International  
Sales and Marketing Organisation



**JAN LUNDBERG**  
Executive Vice-President, Discovery  
Research

**NEW APPOINTMENTS EFFECTIVE FROM 1 JANUARY 2009**



**ANDERS EKBLOM**  
Executive Vice-President, Development



**JEFFREY POTT**  
General Counsel

## CHIEF EXECUTIVE OFFICER AND DELEGATION OF AUTHORITY

The Chief Executive Officer has been delegated authority from, and is responsible to, the Board of AstraZeneca PLC for directing and promoting the profitable operation and development of the Company, consistent with the primary aim of enhancing long-term shareholder value, in relation to all matters save those which have been specifically reserved for the Board.

The Chief Executive Officer is responsible to the Board for the management and performance of the Company's business within the framework of Company policies, reserved powers and routine reporting requirements. He is obliged to refer certain major matters (defined in the formal delegation of the Board's authority) back to the Board. The roles of the Board and the relationship between each of the Board's committees, the Chairman, the Chief Executive Officer and the Senior Executive Team are documented, as are the Board's delegated authorities and reserved powers, the means of operation of the business and the roles of corporate functions.

## SENIOR EXECUTIVE TEAM (SET)

The Chief Executive Officer has established and chairs the SET (pictured on page 86). Although the Chief Executive Officer retains full responsibility for the authority delegated to him by the Board, the SET is the vehicle through which he has chosen to exercise certain of that authority in respect of the Group's business. The SET normally meets once a month to consider and decide major business issues. Typically, it also reviews those matters that are of a size or importance to require the attention of, or that are reserved to, the Board before such matters are submitted to the Board for review and decision.

John Patterson, Executive Director, Development stepped down from his operational position at the end of January 2009 and will retire from the Board on 31 March 2009.

Anders Eklblom was appointed Executive Vice-President, Development and Jeffrey Pott was appointed General Counsel, both with effect from 1 January 2009 when they both became members of the SET.

In July 2008, David Mott resigned from his position as President and Chief Executive Officer of MedImmune to pursue his career outside AstraZeneca. Tony Zook was appointed President of MedImmune with effect from 13 November 2008, having held the position of interim head of MedImmune since David Mott's resignation. Tony Zook retains his other responsibilities as Chief Executive Officer, North America and Executive Vice-President, Global Marketing.

## OPERATION OF THE BOARD OF DIRECTORS

The Board is responsible for the Company's corporate governance, sets the Company's strategy and policies and also monitors progress towards meeting its objectives and annual plans. The Board discharges these responsibilities through a programme of meetings that include a formal, annual strategy review. The Board also assesses whether or not and to what extent its obligations to the Company's shareholders and others are understood and met. This includes regular reviews of the Company's financial performance and critical business issues.

In the view of the Board, at least half of the Board members are, for the purposes of the UK Combined Code on Corporate Governance and the corporate governance standards of the New York Stock Exchange, independent Non-Executive Directors.

Prior to the publication of this Report, the Board conducted its annual review and assessment of how it operates. This was facilitated through a series of web-based questionnaires as well as through interviews between each of the Directors and an external facilitator. These interviews included consideration and discussion of the nature and level of its interaction with the Company's management; the quality, quantity and scope of information which flows to the Board from management, and the way in which it flows; the content of and presentations to Board meetings; the composition of the Board; the practical arrangements for the work of the Board; and the work and operation of the Board's committees. Overall, it was concluded that the Board and its committees were operating in an effective and constructive manner.

As part of the assessment process the external facilitator gave feedback to each Non-Executive Director about his or her individual performance. The Non-Executive

Directors reviewed the performance of the Chief Executive Officer and other Executive Directors in their absence. In addition, the Board, under the chairmanship of the Senior Independent Director, reviewed the performance of the Chairman in his absence.

The Board maintains and regularly reviews a full list of matters and decisions that are reserved to, and can only be approved by, the Board. These include the appointment, termination and remuneration of any Director; the annual budget; any item of fixed capital expenditure or any proposal for the acquisition or disposal of an investment or business which exceeds \$150 million; raising of capital or loans by the Company (subject to certain exceptions); any guarantee in respect of any borrowing of the Company; and allotting shares of the Company. The matters that have not been expressly reserved to the Board are either delegated to its committees or to the Chief Executive Officer.

## BOARD MATTERS

As part of the business of each meeting of the Board, the Chief Executive Officer typically submits a report on progress of each key area of the business and detailing progress against the goals the Board has approved and their activities. The Board also receives accounting and other management information for the assessment of the Company's resources, presentations from internal and external speakers on legal, governance and regulatory developments and external perspectives.

The Company Secretary is responsible to the Chairman for ensuring that all Board and Board committee meetings are properly conducted, that the Directors receive appropriate information prior to meetings to enable them to make an effective contribution, and that governance requirements are considered and implemented.

The Board held six scheduled and two other meetings in 2008. All of the Board meetings were held in London or by telephone.

## BOARD MEETING ATTENDANCE

Name	Number of meetings attended/ (number of meetings Director was eligible to attend in 2008)
Bo Angelin	8(8)
David Brennan	8(8)
John Buchanan	7(8)
Jean-Philippe Courtois <sup>1</sup>	6(7)
Jane Henney	7(8)
Michele Hooper	8(8)
Simon Lowth	8(8)
Rudy Markham <sup>2</sup>	3(3)
Håkan Mogren	5(8)
John Patterson <sup>3</sup>	8(8)
Nancy Rothwell	6(8)
Louis Schweitzer	8(8)
John Varley	6(8)
Marcus Wallenberg	7(8)

<sup>1</sup> Jean-Philippe Courtois was appointed on 18 February 2008 in accordance with the Company's Articles of Association.

<sup>2</sup> Rudy Markham was appointed on 12 September 2008 in accordance with the Company's Articles of Association.

<sup>3</sup> John Patterson will retire on 31 March 2009.

Given the nature of the business to be conducted, some Board meetings are convened at short notice, which occasionally makes it difficult for some Directors to attend due to prior commitments. In such circumstances, the meeting will proceed as scheduled provided it is quorate. The briefing papers will still be sent to the absent Directors who will typically give their comments and feedback on the business to be discussed at the meeting to the Chairman, to be raised at the meeting.

The Board is currently scheduled to meet six times in 2009, and will meet at such other times as may be required to conduct business.

The Nomination and Governance Committee (formerly the Nomination Committee) recommends the appointment of new Directors to the Board by an established procedure. Appointments are based on the merits of the candidates and the relevance of their background and experience, measured against objective criteria, with care taken to ensure that appointees have enough time to devote to the job. Further details of the type of criteria used to select candidates are set out in the Nomination and Governance Committee section on page 91.

In accordance with the Company's Articles of Association (Articles), all Directors retire at each Annual General Meeting (AGM) and may offer themselves for re-election by shareholders (see below for more details). The Board reviews annually the status of succession to senior positions, including those at Board level, and ensures it has regular contact with, and access to, succession candidates.

During 2008:

- > Jean-Philippe Courtois and Rudy Markham were appointed as Non-Executive Directors on 18 February 2008 and 12 September 2008 respectively, in accordance with Article 70 of the Articles.
- > On 4 November 2008, the Company announced that John Patterson will retire from the Board on 31 March 2009.

Newly appointed Directors are provided with comprehensive documentation, setting out their obligations and duties as Directors. They also typically attend tailored induction programmes that take account of their individual skills and experience. To develop an understanding of the major shareholders' views about the Company, the Non-Executive Directors (together with the rest of the Board) regularly receive reports and presentations from the Company's brokers and meet with senior managers throughout the year. Moreover the Directors actively encourage shareholders to attend the AGM and ask questions.

In accordance with Article 65 of the Articles, all of the Directors will retire at the AGM in April 2009. The Notice of AGM will give details of those Directors presenting themselves for election or re-election at the AGM.

The Company maintained directors' and officers' liability insurance cover throughout 2008. The Directors are also able to obtain independent legal advice at the expense of the Company, as necessary in their capacity as Directors.

The Company has entered into a deed of indemnity in favour of each Board member since 2006. These deeds of indemnity are still in force and provide that the Company shall indemnify the Directors to the fullest extent permitted by law and the Articles, in respect of all losses arising out of, or in connection with, the execution of their powers, duties and responsibilities, as Directors of the Company or any of its subsidiaries. This is in line with current market practice and helps the Company attract and retain high-quality skilled Directors.

## OPERATION OF BOARD COMMITTEES

The Board has delegated certain responsibilities to the Audit, Remuneration, Nomination and Governance, and Science Committees. The Board provides adequate resources to enable each committee to undertake its duties. Each of the Audit, Remuneration, and Nomination and Governance Committees is made up of Non-Executive Directors, although Executive Directors may be invited to attend meetings. Members of the Science Committee include Executive Directors, Non-Executive Directors and certain senior managers. However, this Committee is purely advisory in nature. Further details of the role, membership and terms of reference for each committee are set out below. In addition to the standing committees of the Board, there may from time to time be constituted ad hoc committees for specific projects or tasks. In these cases, the scope and responsibilities of the committee is documented.

## BOARD COMMITTEE MEMBERSHIP

Name	Audit Committee	Remuneration Committee	Nomination and Governance Committee	Science Committee	Independent <sup>1</sup>
Bo Angelin	x	x	x	✓	✓
David Brennan	x	x	x	x	x
John Buchanan	Chair	✓	x	x	✓
Jean-Philippe Courtois <sup>2</sup>	✓	x	x	x	✓
Jane Henney	✓	x	✓	✓	✓
Michele Hooper <sup>3</sup>	✓	x	✓	x	✓
Simon Lowth	x	x	x	x	x
Rudy Markham <sup>4</sup>	✓	x	x	x	✓
Håkan Mogren	x	x	✓	x	x
John Patterson	x	x	x	✓	x
Nancy Rothwell	x	✓	x	Chair	✓
Louis Schweitzer	x	✓	Chair	x	N/A <sup>5</sup>
John Varley	x	Chair	✓	x	✓
Marcus Wallenberg	x	x	x	x	x

<sup>1</sup> As determined by the Board for UK Combined Code purposes.

<sup>2</sup> Appointed 18 February 2008.

<sup>3</sup> Michele Hooper is the Senior Non-Executive Director.

<sup>4</sup> Appointed 12 September 2008.

<sup>5</sup> For the purposes of the UK Combined Code (although determined by the Board to be independent on appointment).

## AUDIT COMMITTEE



"During the year, the Audit Committee continued to review critical accounting judgements and the quarterly financial results. The Audit Committee considered reports from senior management and reviewed reports from key assurance and governance functions within the Group as part of its role of overseeing how risk is managed. It explored with management how they will continue to deliver high-quality oversight, monitoring and evaluation of risk against the background of some significant changes, both within the business and in the external environment."

**JOHN BUCHANAN**  
Chairman of the Audit Committee

The current members of the Audit Committee are John Buchanan (Audit Committee Chairman), Jane Henney, Michele Hooper (the Senior Non-Executive Director), Jean-Philippe Courtois (who joined on 18 February 2008) and Rudy Markham (who joined on 12 September 2008). They are all Non-Executive Directors. The Board considers each member to be independent under the UK Combined Code and under the general guidance and specific criteria of the New York Stock Exchange's (NYSE) corporate governance listing standards concerning the composition of audit committees applicable to non-US companies. In April 2008, the Company submitted the required annual written affirmation to the NYSE confirming its full compliance with those standards. For the purposes of the UK Combined Code, the Board remains satisfied that at least one member of the Audit Committee has recent and relevant financial experience. At its meeting in December 2008, the Board determined that Michele Hooper and Rudy Markham are audit committee financial experts for the purposes of the US Sarbanes-Oxley Act of 2002. The Deputy Company Secretary acts as secretary to this committee.

The core remit of the Audit Committee includes reviewing and reporting to the Board on:

- > Matters relating to the audit plans of the external auditor and Group Internal Audit (GIA).

- > The Company's overall framework for internal control over financial reporting and for other internal controls and processes.
- > The Company's overall framework for risk management, particularly financial risks.
- > The accounting policies and practices of the Company.
- > The annual and quarterly financial reporting carried out by the Company.

The Audit Committee is charged with promptly bringing to the attention of the Board any significant concerns of the external auditor or the Vice-President, GIA arising from their audit work, any matters that may significantly affect or impair the independence of the external auditor, any significant deficiencies or material weaknesses in the design or operation of the Company's internal control over financial reporting or other internal controls, and any serious issues of non-compliance.

The Audit Committee oversees the establishment, implementation and maintenance of the Company's Code of Conduct and other related policies. It establishes procedures for the receipt and handling of complaints concerning accounting or audit matters. It recommends to the Board the appointment of the external auditor, subject to the approval of the Company's shareholders at a general meeting. Shareholders in a general meeting authorise the Directors to fix the remuneration of the external auditor. The Audit Committee reviews and approves the appointment and any dismissal of the Vice-President, GIA.

The Audit Committee maintains policies and procedures for the pre-approval of all audit services and permitted non-audit services undertaken by the external auditor, the principal purpose of which is to ensure that the independence of the external auditor is not impaired. The policies and procedures cover three categories of work – audit services, audit-related services and tax services. The policies define the type of work that falls within each of these categories and the non-audit services that the external auditor is prohibited from performing under the rules of the US Securities and Exchange Commission and other relevant UK professional and regulatory requirements. The pre-approval procedures permit certain audit, audit-related and tax services to be performed by the external auditor during the year, subject to fee limits agreed with the Audit Committee in advance. The Chief Financial Officer (supported by the Senior Vice-President, Group Finance; Vice-President, Global Benefits; and Director,

Corporate Finance & Insurance) monitors the status of all services being provided by the external auditor. The procedures also deal with placing non-audit work out for tender, where appropriate. Authority to approve work in excess of the pre-agreed fee limits is delegated to the Chairman of the Audit Committee in the first instance. A standing agenda item at Audit Committee meetings covers the operation of the pre-approval procedures and regular reports are provided to the full Audit Committee.

The Audit Committee's remit is available on the Company's website, [astrazeneca.com](http://astrazeneca.com).

The Audit Committee held four scheduled meetings during 2008. All of these meetings were held in London, UK. All Audit Committee members participated in all meetings either in person or by telephone, except John Buchanan, who was absent from the meeting on 29 January 2008.

Following each Audit Committee meeting, the Chairman of the Committee (or the Senior Non-Executive Director in the absence of the Chairman of the Committee) reported to the Board on the principal matters covered at the meeting and minutes of the meetings were circulated to all Board members.

Members of the Audit Committee met individual managers or groups of managers from the Company on a number of occasions during 2008, which helped the Audit Committee members gain a deeper insight into areas relevant to the Audit Committee's work and provided an opportunity to discuss specific areas of interest.

During the year, in line with its normal practice, the Audit Committee also held a number of private meetings, without management present, with the Company's Vice-President, GIA, the Global Compliance Officer and the lead partners from the Company's external audit firm. The purpose of these meetings was to facilitate free and open discussions between the Audit Committee members and those individuals, separately from the main sessions of the Audit Committee, which were attended by the Chief Financial Officer and the Senior Vice-President, Group Finance.

During 2008 and January 2009, the business considered and discussed by the Audit Committee included the matters referred to below:

- > The Company's financial disclosures were reviewed and various accounting matters considered.

- > Reports were received from the external auditor concerning its audit of the Financial Statements of the Group and from management, GIA, Global Compliance and the external auditor on the effectiveness of the Company's system of internal controls and, in particular, its internal control over financial reporting. This included review and discussion of the results of the Company's 'continuous assurance' and annual 'letter of assurance' processes (described further below in the UK Corporate Governance Requirement section). The Audit Committee also reviewed quarterly activity reports of audit work carried out by GIA and the status of follow-up actions with management as well as reports from the Global Compliance function.
- > The Company's continuing work to comply with the applicable provisions of the US Sarbanes-Oxley Act of 2002. In particular, it regularly reviewed the status of compliance with the programme of internal controls over financial reporting implemented pursuant to section 404 of the Act. Further information about the implementation of section 404 of the Act is set out in the Financial Review on page 47.
- > A review of data about calls made by employees via the AZethics telephone lines and other routes regarding potential breaches of the Company's Code of Conduct together with the results of enquiries into these matters. No material issues were reported through this route during the year.
- > The Audit Committee reviewed reports from the Vice-President, GIA on areas where GIA's resources could most appropriately be focused and where efficiency savings could be achieved in the context of the strengthening capabilities of the Global Compliance function and the continued work of the Financial Controls and Compliance Group.
- > Reports from the Group Treasury Function and, in particular, considered the Group's liquidity and cash position and the appropriateness of its cash management policies in the context of the current economic situation.
- > Other reports concerning the GIA, global compliance and financial compliance and control and the global finance functions, including the internal audit plan and progress and plans of the Global Compliance Officer.
- > The amount of audit and non-audit fees of the external auditor throughout 2008. The Audit Committee was satisfied throughout the year that the objectivity and independence of the external auditor were not in any way impaired by either the nature of the non-audit work undertaken by the external auditor during the year, the level of non-audit fees charged for such work or any other facts or circumstances. Further information about the audit and non-audit fees for the year is disclosed in Note 27 to the Financial Statements on page 163.
- > A review and assessment of the Audit Committee's performance and it was concluded that this was satisfactory.

In line with best practice, the Group will periodically consider how the audit requirements of the Group are best served in the context of business need and the prevailing external environment and, against the background of this review, will from time to time undertake a formal tendering programme with audit firms of appropriate size and calibre. Following discussions at a meeting in January 2009, the Audit Committee unanimously recommended to the Board that a resolution for the re-appointment of KPMG Audit Plc as the Company's external auditor be proposed to shareholders at the AGM in April 2009. Based on its experience of working with external auditors, the Audit Committee believes that the quality of the interaction with and level of service received from KPMG Audit Plc were key factors supporting this recommendation. The Audit Committee was also satisfied that, notwithstanding the length of tenure of KPMG Audit Plc, KPMG Audit Plc met the independence criteria under the relevant statutory, regulatory and accounting standards. Consistent with current market practice, KPMG Audit Plc's services to the Group are provided pursuant to terms of engagement which are reviewed by the Audit Committee. These terms of engagement do not include any contractual obligations under which the Directors would be prevented from appointing a different audit firm were they to consider this to be in the best interests of the Group. The Audit Committee, through management, continues to maintain contact and dialogue with other major audit firms who are familiar with the Company's business for succession purposes as required. This is reported to the Audit Committee in order to ensure a smooth transition from the current auditor, should this be necessary.

At the same meeting, the Chief Executive Officer and the Chief Financial Officer presented to the Audit Committee their conclusions following the evaluation of the effectiveness of the Company's disclosure controls and procedures required by Item 15(a) of Form 20-F as at 31 December 2008. Based on their evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that, as at that date, the Company maintains an effective system of disclosure controls and procedures.

There was no change in the Company's internal control over financial reporting that occurred during the period covered by this Annual Report and Form 20-F Information 2008 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

The Audit Committee is currently scheduled to meet four times in 2009 and will meet at such other times as may be required.

#### **REMUNERATION COMMITTEE**

The remit and role of the Remuneration Committee is to consider, on behalf of the Board, the remuneration (including pension rights and compensation payments) of Executive Directors, the Chairman and senior executives. More information is set out in the Executive Directors' and Senior Executive Team's Remuneration and Terms of Employment section within the Directors' Remuneration Report on pages 174 to 188.

The information contained in the Directors' Remuneration Report on pages 174 to 188 relating to the remit and members of the Remuneration Committee during 2008, as well as the independence of those members and the number of meetings they attended throughout the year, is incorporated by reference into this Directors' Report.

## NOMINATION AND GOVERNANCE COMMITTEE



"During the year, the Nomination and Governance Committee's work focused on identifying candidates of the calibre and experience to further strengthen the Board and its Committees, with the help of specialist external search and selection consultancies. This resulted in the Nomination and Governance Committee making recommendations to the Board for the appointments of both Jean-Philippe Courtois and Rudy Markham as Non-Executive Directors."

**LOUIS SCHWEITZER**  
Chairman of the Nomination and Governance Committee

The Nomination and Governance Committee's core remit continues to be (after appropriate consultation with the Chairman and the Chief Executive Officer) to recommend to the Board any new appointments of Directors. Any decisions relating to the appointment of a Director are made by the entire Board. Following a change to its remit during 2008, the Nomination and Governance Committee also advises the Board periodically on significant developments in corporate governance and the Company's compliance with the UK Combined Code on Corporate Governance. Consequently, the Committee was re-named the Nomination and Governance Committee.

The members of the Nomination and Governance Committee during 2008 were Louis Schweitzer (Nomination and Governance Committee Chairman), Håkan Mogren, Jane Henney, Michele Hooper and John Varley. They are all Non-Executive Directors. With the exception of Håkan Mogren (for the reasons explained on page 92), the Board considers them all to be independent (Louis Schweitzer was considered independent upon his appointment as Chairman to the Board; in accordance with the UK Combined Code on Corporate Governance, the test of independence is not appropriate in relation to the Chairman after his appointment). The Company Secretary acts as secretary to this Committee.

The Nomination and Governance Committee formally met three times in 2008. Each member attended all of the formal meetings except for Håkan Mogren due to a conflicting appointment. The principal tasks in relation to nomination matters in 2008 related to the appointments of Jean-Philippe Courtois and Rudy Markham to the Board. These appointments further strengthened the Board in terms of significant experience of sales and product marketing in an organisation with global reach, and in-depth financial experience and expertise with international companies. A leading external search consultancy was used for the appointments of both Non-Executive Directors to ensure that the Company had access to candidates with the appropriate set of skills and competencies. In addition to considering these new appointments to the Board, the Nomination and Governance Committee also reviewed the knowledge, experience and balance of the Board overall and considered its likely future requirements given the strategic and business objectives of the Company.

The Nomination and Governance Committee's remit is available on the Company's website, [astrazeneca.com](http://astrazeneca.com).

## SCIENCE COMMITTEE

Science Committee members have a knowledge of, or an interest in, life sciences. During 2008, its members were Nancy Rothwell (Science Committee Chairman), Jane Henney, Jan Lundberg, John Patterson and Bo Angelin. They are all Non-Executive Directors, except Jan Lundberg and John Patterson. The Global Head Discovery, Strategy and Performance, also attends all meetings and acts as secretary to this Committee.

The Science Committee's principal tasks are:

- > To provide assurance to the Board regarding the quality, integrity and competitiveness of the Company's science-based R&D activities. The Committee aims to assure itself that the approaches and targets adopted throughout the R&D organisation are competitive and an appropriate use of shareholders' funds, but is not expected to review individual research or licensing projects.
- > To consider reports from or join any meeting with any relevant external advisory board when the Company is considering entry into new areas of science or medicine.

- > To review, from time to time, together with other external experts important bioethical issues faced by the Company and to assist in the formulation of, and to agree on behalf of the Board, appropriate policies in relation to such issues.
- > To consider with external experts, from time to time, future trends in medical science and technology.

The Science Committee's remit is available on the Company's website, [astrazeneca.com](http://astrazeneca.com).

The Science Committee met twice in 2008 to review and discuss its remit and method of operation, the Company's Cardiovascular and Neuroscience R&D, innovation with R&D, emerging areas of science and its science policy. Each member participated in both meetings.

## PRINCIPAL UK AND US GOVERNANCE REQUIREMENTS

## UK CORPORATE GOVERNANCE REQUIREMENTS

The Board has prepared this Report with reference to the UK Combined Code on Corporate Governance and related guidance published in June 2006 by the Financial Reporting Council. A new version of the UK Combined Code was published in June 2008 and applies to accounting periods beginning on or after 29 June 2008. The Board believes that, were these standards to be applied with respect to the current arrangements, it would comply with the latest standards.

The Company is applying all the main and supporting principles of good governance in the UK Combined Code as described below. The Company has complied throughout the accounting period and is also continuing to comply with all of the provisions of the UK Combined Code.

The Board has overall responsibility for the Company's system of internal controls. Since the publication in September 1999 by the Institute of Chartered Accountants in England and Wales of the Turnbull Report, 'Internal Control: Guidance for Directors on the UK Combined Code', the Directors have continued to review the effectiveness of the Group's system of controls, risk management and the Group's high-level internal control arrangements. These reviews have included an assessment of internal controls, and in particular internal, financial, operational and compliance controls and risk management and their effectiveness, supported by

management assurance of the maintenance of control, reports from GIA, as well as the external auditor on matters identified in the course of its statutory audit work. The Board is also responsible for reviewing the effectiveness of the system of internal controls and risk management policies. The system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable (not necessarily absolute) assurance of effective operation and compliance with laws and regulations.

Underpinning these reviews is an annual 'letter of assurance' process by which responsible managers confirm the adequacy of their systems of internal financial and non-financial controls, their compliance with Group policies, relevant laws and regulations (including the industry's regulatory requirements), and confirm they have reported any control weaknesses through the Group's 'continuous assurance' process.

The internal control framework has been in operation for the whole of the year under review and continues to operate up to the date of the approval of this Report. The Directors believe that the Group maintains an effective, embedded system of internal controls and complies with the Turnbull Report guidance and, in the view of the Directors, no significant failings have been identified in the system.

Further information on the ways in which we manage our business risks is set out in the section titled 'Risk' on page 74 and a list of the principal risks and uncertainties is set out in the Principal Risks and Uncertainties section from page 76.

During 2008, the Board considered the independence of each Non-Executive Director. With the exception of two of them (as set out below), the Board considers that all of the Non-Executive Directors are independent in character and judgement and that there are no relationships or circumstances that are likely to affect, or could appear to affect, their independent judgement. Louis Schweitzer was considered by the Board to be independent upon his appointment as Non-Executive Chairman; in accordance with the UK Combined Code, the test of independence is not appropriate in relation to the Chairman after his appointment.

For the reasons explained below, the Board believes that neither Håkan Mogren, Non-Executive Deputy Chairman, nor Marcus Wallenberg can be determined independent

under the UK Combined Code. However, the Board believes that they both have brought, and continue to bring, considerable business experience and to make valuable contributions to the work of the Board.

Håkan Mogren was previously the Chief Executive Officer of Astra AB and Executive Deputy Chairman of the Company and is now a member of the Board of Directors of Investor AB, a company that, as at 31 December 2008, held approximately 3.6% of the Ordinary Shares of the Company. This holding represents a significant proportion of Investor AB's overall investment portfolio. Marcus Wallenberg was a member of the Board of Directors and Chief Executive Officer of Investor AB until 1 September 2005, when he stepped down.

The Board also considered, in particular, the position of Michele Hooper who joined the board of UnitedHealth Group as a Non-Executive Director in 2007. The Board's approval to this appointment was conditional upon Michele Hooper resigning from the board of UnitedHealth Group in the event of a conflict or non-independence. It is the Board's view that Michele Hooper is independent and that she discharges her duties in a properly independent manner, constructively and appropriately challenging the Executive Directors and the Board.

Jane Henney is a Non-Executive Director of AmerisourceBergen Corporation and CIGNA Corporation, both of which are customers of the Group in the US. The Board has considered these relationships and concluded that they did not compromise her independence.

The position of Senior Non-Executive Director of the Company was established in 2002. Michele Hooper (who was appointed as a Non-Executive Director in 2003) became the Company's Senior Non-Executive Director in April 2007.

At the AGM in 2008, a resolution was passed to amend the Articles to enable the Directors to sanction conflicts of interest in relation to any Director, that amounts, or could amount, to a conflict with the Company's interests and which would otherwise be a breach of the Director's duty, under the relevant sections of the UK Companies Act 2006.

In September 2008, letters were sent to each of the Directors requesting them to notify the Company of any such conflicts or potential conflicts. The Board considered the responses to these letters and in particular whether or not they amounted to an actual or potential

conflict. In respect of the Executive Directors, the Board (with the Executive Directors abstaining) authorised any conflict that may arise in relation to any of the Executive Directors holding another directorship of a company within the AstraZeneca Group. In respect of the Non-Executive Directors, no conflicts or potential conflicts were considered to exist that required authorisation. The Company Secretary will be responsible for maintaining a register of notifications received from Directors in relation to conflicts of interest and, where appropriate, any authorisation given. The Board will go through a similar process on at least an annual basis.

#### US CORPORATE GOVERNANCE REQUIREMENTS

AstraZeneca PLC American Depository Shares are traded on the New York Stock Exchange and, accordingly, the Company is subject to the reporting and other requirements of the US Securities and Exchange Commission (SEC) applicable to foreign private issuers. Section 404 of the US Sarbanes-Oxley Act of 2002 requires companies to include in their annual report on Form 20-F filed with the SEC a report by management stating its responsibility for establishing internal control over financial reporting and to assess annually the effectiveness of such internal control. The Company has complied with those provisions of the Act applicable to foreign private issuers. The Board continues to believe the Group has a sound corporate governance framework, good processes for the accurate and timely reporting of its financial position and results of operations and an effective and robust system of internal controls. The Company has established a Disclosure Committee, further details of which can be found in the Disclosure Policy and Disclosure Committee section on page 94.

Further information about the work undertaken during 2008 to enable the Company to comply with the SEC rules that implement section 404 of the Act can be found in the Sarbanes-Oxley Act section 404 section of the Financial Review on page 47. The Directors' assessment of the effectiveness of the internal control over financial reporting is set out in the Financial Statements on page 98.

The Company must disclose any significant ways in which its corporate governance practices differ from those followed by US companies under the NYSE's corporate governance listing standards. In addition, the Company must comply fully with the provisions of the listing standards that relate to the composition, responsibilities and operation of audit committees. These

provisions incorporate the rules concerning audit committees implemented by the SEC under the Sarbanes-Oxley Act of 2002.

The Company has reviewed the corporate governance practices required to be followed by US companies under the NYSE's listing standards and its corporate governance practices are generally consistent with those standards. However, not all members of the Nomination and Governance Committee are considered independent for these purposes, as explained in more detail on page 92.

#### CODE OF CONDUCT

The new AstraZeneca Code of Conduct was launched in May 2008 and is available on the Company's website, [astrazeneca.com](http://astrazeneca.com). The new Code became effective on 1 July 2008 and applies to all Directors, officers, full-time, part-time, contractor and temporary staff at all levels in every country where we operate. It has been translated into over 40 languages and every employee has a copy in his/her local language. It is designed to provide clear direction as to how the Company's commitment to honesty and integrity is to be translated into consistent actions across all areas of the business. Compliance with the Code of Conduct and with the standards detailed by the Company in support of it is mandatory. The same applies to the laws and regulations of the countries in which we work and do business, as well as applicable national and international codes, and the Company seeks to operate to the highest of these standards.

The new Code unites every member of the Group under a single Code of Conduct. It provides guidance across all areas of activity previously covered by the US code, which is therefore no longer required.

The Code also includes information on how to report possible violations of the Code through the appropriate channels, including the AZethics telephone lines and the new global website, [AZethics.com](http://AZethics.com). Anyone who raises a possible breach in good faith will be supported by management and will not be subject to retaliation, which would itself be considered a serious violation of the Code. We review all alleged compliance breaches and concerns, and we investigate and report on them to the Audit Committee, as appropriate.

During 2008, 206 reports of alleged compliance breaches or other ethical concerns were made via the telephone helplines, [AZethics.com](http://AZethics.com) website or Global Compliance e-mail or postal addresses described in the

Code of Conduct. The number of reports via the equivalent channels in 2007 was 133. We believe the increase in the number of reports via these channels is due, in part, to our efforts to enhance these reporting channels and, in part, to the increase in awareness following the launch of the new Code of Conduct and the accompanying training and communications. To date, no material issues have been identified through these mechanisms.

The Group policies have also recently been reviewed, and a new Global Policy Structure was launched in November 2008 and came into effect in January 2009. As with the Code of Conduct, the Global Policies apply to all members of the Group. Like the Code of Conduct, the new Global Policies provide clearer and more comprehensive guidance, in plain language, to all managers and employees as to their accountabilities in key ethical, compliance and corporate responsibility risk areas.

A critical element of the effective implementation of the new Code of Conduct and Global Policies is to deliver clear training and education to employees on an ongoing basis. One of the SET scorecard objectives for 2008 was to train all our employees on the new Code of Conduct during 2008. Training began in July, and all employees have completed the course. Further training will be delivered on an annual basis.

A Group Finance Code of Conduct complements the Code of Conduct. It applies to the Chief Executive Officer, the Chief Financial Officer, the Group's principal accounting officers (including key Finance staff in major overseas subsidiaries) and all Finance function employees, and it reinforces the importance of the integrity of the Group's Financial Statements, of the reliability of the accounting records on which they are based and of the robustness of the relevant controls and processes.

#### COMPLIANCE AND GROUP INTERNAL AUDIT (GIA)

The role of the Global Compliance function is to help embed a culture of ethics and integrity at AstraZeneca. Global Compliance works closely with GIA, with whom it provides joint assurance reporting to the Audit Committee. The key priorities for our Global Compliance function for 2008/2009 are closely aligned with the Company's strategic priorities. During 2009, the focus will be on embedding the compliance framework developed in 2008 into the business.

During 2008, the Global Compliance Committee met regularly. The remit of the committee is to oversee and co-ordinate implementation of an effective global compliance programme and evaluate its effectiveness. It does this by assessing key compliance risks within and across SET areas; ensuring co-ordination of compliance auditing and monitoring; reviewing results; and addressing significant policy violations and identifying trends.

Global Compliance provides direct assurance to the Audit Committee on matters concerning compliance issues, with a particular focus on compliance with IFPMA, EFPIA and US PhRMA codes. Complementing this, GIA carries out a range of audits that includes compliance-related audits and reviews of the assurance activities of other Company assurance functions. The results from these activities are reported to the Audit Committee.

GIA is an independent appraisal function that derives its authority from the Board through the Audit Committee. Its primary role is to provide reasonable and objective assurance to the Directors about the adequacy and effectiveness of the Company's risk management and control framework and the internal controls over key business risks, including financial controls and compliance with laws, regulations and policies.

GIA seeks to discharge the responsibilities set down in its charter by reviewing:

- > The processes for ensuring that key business risks are effectively managed.
- > The financial and operational controls that help to ensure that the Group's assets are properly safeguarded from losses, including fraud.
- > The controls that help to ensure the reliability and integrity of management information systems.
- > The processes for ensuring compliance with policies and procedures, external legislation and regulation.
- > On an ad hoc basis, whether value for money is obtained (in terms of efficient use of the Group's resources).

GIA acts as a source of constructive advice and best practice, assisting senior management with its responsibility to improve governance, control, compliance and risk management.

## DISCLOSURE POLICY AND DISCLOSURE COMMITTEE

The Group's Disclosure Policy provides a framework for the handling and disclosure of inside information and other information of interest to shareholders and the investment community. It also defines the role of the Disclosure Committee. The Chief Financial Officer, the Executive Director, Development, the Group Secretary and Solicitor, the Vice-President, Corporate Affairs, the Vice-President, Investor Relations and the Senior Vice-President, Group Finance were the members of the Disclosure Committee during 2008. The Deputy Company Secretary acts as secretary to this committee. The Disclosure Committee meets regularly to assist and inform the decisions of the Chief Executive Officer concerning inside information and its disclosure. Periodically, it reviews the Group's disclosure controls and procedures and its own operation as part of work carried out to enable management and the Board to assure themselves that appropriate processes are operating for the Company's planned disclosures, such as its quarterly results announcements and scheduled investor relations events. In addition, the Disclosure Committee members are members of the steering group that reviews the drafts of, and the process for preparing, this Annual Report and Form 20-F Information.

## DISCLOSURE OF INFORMATION TO AUDITORS

The Directors who held office at the date of approval of this Directors' Report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditors are unaware; and each Director has taken all the steps that he/she ought to have taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

## OTHER MATTERS

### OTHER COMPANY DISCLOSURES AND INFORMATION

#### Subsidiaries and principal activities

AstraZeneca PLC is the holding company for a group of subsidiaries whose principal activities are described in this Directors' Report on pages 8 to 96. Principal subsidiaries and their locations are given in the Principal Subsidiaries section on page 164.

#### Branches and countries in which the Company conducts business

In accordance with the Companies Act 1985, we disclose below the members of the Group that have representative or scientific branches/offices outside the UK:

AstraZeneca UK Limited: Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Chile, Costa Rica, Croatia, Cuba, Ghana (scientific office), Ireland, Jordan, Kazakhstan, Romania, Russia, Serbia and Montenegro, Slovenia and Ukraine.

AstraZeneca AB: Egypt (scientific office), Latvia, Saudi Arabia (scientific office) and Slovakia.

AstraZeneca Export and Trading AB: Estonia, Lithuania, Romania and the United Arab Emirates.

#### Dividend

The Company's dividends for 2008 of \$2.05 (132.6 pence, SEK 15.36) per Ordinary Share amount to, in aggregate, a total dividend payment to shareholders of \$2,171 million.

Two of the Company's employee share trusts, AstraZeneca Share Trust Limited and AstraZeneca Quest Limited, waive their right to a dividend on the Ordinary Shares that they hold and instead receive a nominal dividend.

#### Going concern accounting basis

Information on the business environment AstraZeneca operates in, including the factors underpinning the industry's future growth prospects, are included on pages 9 to 11 of this Directors' Report. Details of the product portfolio of the Group, our approach to product development and our development pipeline are included on pages 16 to 24, with additional information by major product group on pages 53 to 70.

The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Financial Review. In addition, Notes 15 and 16 to the Financial Statements include the Group's objectives, policies and processes for managing its capital, its financial risk management objectives, details of its financial instruments and hedging activities and its exposures to credit, market and liquidity risk. Further details of the Group's cash balances and borrowings are included in Notes 13 and 14 of the Financial Statements.

The Group has considerable financial resources available. As at 31 December 2008, the Group has \$7.8 billion in financial resources (cash balances of \$4.3 billion and committed bank facilities of \$4.3 billion, with \$0.8 billion of debt due within one year). The Group's revenues are largely derived from sales of products which are covered by patents and for which, in the short term at least, demand is relatively unaffected by

changes in the global economy. In addition, the Group has a wide diversity of customers and suppliers across different geographic areas. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully despite the current uncertain economic outlook.

After making enquiries, the Directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the Annual Report and Form 20-F Information and Financial Statements.

#### Changes in share capital

Changes in the Company's Ordinary Share capital during 2008, including details of the allotment of new shares under the Company's share plans, are given in Note 20 to the Financial Statements.

#### Directors' shareholdings

The Company's Articles require each Director to be the beneficial owner of Ordinary Shares in the Company with an aggregate nominal value of \$125 (500 shares). Such holding must be obtained within two months of the date of the Director's appointment. At 31 December 2008, all of the Directors complied with this requirement and full details of each Director's interests in shares of the Company are set out in the Directors' Remuneration Report on page 185. Information about the shareholding expectations of the Remuneration Committee (in respect of Executive Directors and SET members) and the Board (in respect of Non-Executive Directors) is also set out in the Directors' Remuneration Report. Separately, both the Non-Executive Directors and the Executive Directors (and members of the SET) are required as a matter of policy to build up a minimum level of shareholding in the Company. Details of these policies are set out in the Directors' Remuneration Report on pages 181 and 179, respectively.

#### Shareholder communications

In its financial and business reporting to shareholders and other interested parties by means of quarterly, half-year and full-year reports, the Board aims to present a balanced and understandable assessment of the Group's financial position and prospects.

The Company makes available to shareholders information about the Company through a range of media, including a fully integrated html corporate website ([astrazeneca.com](http://astrazeneca.com)) containing a wide range of information of interest to institutional and private investors.

The Company considers its website to be an important means of communication with shareholders. Accordingly, and as permitted by a change in UK company law, at the 2007 AGM of the Company, a resolution was proposed and approved which authorised the Company to place shareholder communications (such as the Notice of AGM and the Annual Report and Form 20-F Information) on its corporate website in lieu of sending paper copies to shareholders (unless specifically requested by shareholders). Whilst recognising and respecting the fact that some of our stakeholders may have different preferences regarding the manner in which they receive information about the Company, we will continue to promote the benefits of electronic communication given the advantages that this has over traditional paper-based communications both in terms of the configurability and accessibility of the information that is provided and the consequent cost savings and reduction in environmental impact associated with reduced printing and distribution costs.

The Company has frequent discussions with institutional shareholders on a range of issues affecting its performance. These include individual meetings with some of the Company's largest institutional shareholders to seek their views and any concerns can be reported to the Board. In addition, the Company responds to individual ad hoc requests for discussions from institutional shareholders and analysts. The Group's Investor Relations department acts as a main point of contact for investors throughout the year. The Senior Non-Executive Director is also available to shareholders if they have concerns that contact through the normal channels of Chairman, Chief Executive Officer, Chief Financial Officer and/or the Group Investor Relations department has failed to resolve, or in relation to which such contact is inappropriate.

All shareholders, including private investors, have an opportunity at the AGM to put questions to members of the Board on matters relating to the Company's operation and performance. Formal notification of the AGM is sent to shareholders at least one month in advance. The Chairmen of the Board's committees ordinarily attend the AGM to answer questions raised by shareholders. In line with the UK Combined Code, details of proxy voting by shareholders, including votes withheld, are made available on request and are placed on the Company's website following the AGM.

### Distributions to shareholders

The Company's stated distribution policy comprises both a regular cash dividend and a share re-purchase component, further details of which are set out in the Financial Review on page 37 and the Financial Statements on page 129.

Pursuant to the shareholders' resolution passed at the 2008 AGM authorising the Company to purchase its own shares, during 2008 the Company re-purchased (and subsequently cancelled) 13.6 million of its own Ordinary Shares with a nominal value of \$0.25 each, at an aggregate cost of \$610 million, representing 0.9% of the total issued share capital of the Company. The average price paid per share in 2008 was 2397 pence. Shares issued in respect of share schemes totalled 4.1 million. The Board announced in the Third Quarter and Nine Month Results 2008 that no further share re-purchases would take place in 2008 in order to maintain the flexibility to invest in the business. For the same reason, the Board has decided that no share re-purchases will take place in 2009.

The Company executed the share re-purchase programme through a combination of discretionary purchases and through irrevocable, non-discretionary instructions. The Company continues to maintain robust controls in respect of all aspects of the share re-purchase programme to ensure compliance with English and other applicable law and the Financial Services Authority's Listing Rules, Disclosure and Transparency Rules and Prospectus Rules. However, in order to maintain flexibility, the Company will seek a renewal of its current permission from shareholders to purchase its own shares at the AGM on 30 April 2009.

Since the Company began its share re-purchase programmes in 1999, a total of 376.3 million Ordinary Shares were re-purchased, and subsequently cancelled, at an average price of 2661 pence per share for a consideration, including expenses, of \$18,099 million.

### Political donations

Neither the Company nor its subsidiaries made any donations or incurred any expenditure in 2008 in the EU and they do not intend to do so in the future in respect of which shareholder authority is required (or for which disclosure in this Report is required under the Companies Act 2006).

However, to enable the Company to continue to support interest groups or lobbying organisations concerned with the review of government policy or law reform without inadvertently breaching the Companies Act 2006, which defines political donations and other political expenditure in broad terms, a resolution will be put to shareholders at the 2009 AGM, similar to that passed at the AGM on 24 April 2008, to authorise the Company and its subsidiaries to make: (i) donations to political parties; (ii) donations to political organisations other than political parties; and (iii) incur political expenditure, up to an aggregate limit of \$250,000.

In 2008, AstraZeneca's US legal entities made contributions amounting in aggregate to \$815,838 (2007: \$321,645) to state political party committees and to campaign committees of various state candidates affiliated with the major parties in accordance with pre-established guidelines. No corporate donations were made at federal level, and all contributions were made only where allowed by US federal and state law. American citizens or individuals holding valid green cards exercised decision-making over the contributions and the funds were not provided or reimbursed by any non-US legal entity. Such contributions do not constitute political donations or political expenditure for the purposes of the Companies Act 1985 or Companies Act 2006 and were made without any involvement of persons or entities outside the US.

### Takeovers directive

Following the implementation of paragraph 13, Part VII, Schedule 7 of the Companies Act 1985 (inserted by section 992 of the Companies Act 2006), the Company is required to make certain additional disclosures.

Where disclosures are required they can be found in other parts of this Report as listed below, each of which is incorporated into this Directors' Report:

- > Structure of the Company's share capital and rights and obligations attaching to shares (contained in the Corporate Information section starting on page 197 and Notes to the Financial Statements on page 129).
- > Significant holders of the Company's shares (contained in the Shareholder Information section starting on page 190).
- > Appointment and replacement of Directors (contained in the Corporate Governance section starting on page 83).

- > Powers of Directors (contained in the Corporate Governance section starting on page 83).
- > Amendments to the Company's Articles (contained in the Corporate Information section starting on page 197).
- > Details of the Company's employee share schemes (set out on pages 139 to 142).

There are no significant agreements to which the Company is a party that take effect, alter or terminate on a change of control of the Company following a takeover bid.

There are no persons, with whom the Company has contractual or other arrangements, who are deemed to be essential to the business of the Company.

#### **Use of financial instruments**

Notes 15 and 16 to the Financial Statements entitled Financial Risk Management Objectives and Policies/Financial Instruments on pages 120 to 126, include further information on the Company's use of financial instruments.

#### **Creditor payment policy**

It is not Company policy formally to comply with the Confederation of British Industry's code of practice on the prompt payment of suppliers. It is, however, Company policy to agree to appropriate payment terms with all suppliers when agreeing to the terms of each transaction, to ensure that those suppliers are made aware of the terms of payment and, subject to their compliance, abide by the terms of payment. The total amount of money owed by AstraZeneca PLC's subsidiaries to trade creditors at the balance sheet date was equivalent to 92 days' average purchases (2007: 81 days). No equivalent disclosure is provided in respect of AstraZeneca PLC, as it has no external trade creditors.

#### **Annual General Meeting**

The Company's AGM will be held on 30 April 2009. The meeting place will be in London. A Notice of AGM will be sent to all registered holders of Ordinary Shares and, where requested, to the beneficial holders of shares.

#### **External auditor**

A resolution will be proposed at the AGM on 30 April 2009 for the re-appointment of KPMG Audit Plc, London as auditor of the Company.

The external auditor has undertaken various pieces of non-audit work for the Company during 2008. More information about this work and the audit and non-audit fees paid by the Company are set out in Note 27 to the Financial Statements on page 163. The external auditor is not engaged by the Company to carry out any non-audit work on which it might, in the future, be required to express an audit opinion. As explained more fully in the Audit Committee section on page 89, the Audit Committee has established pre-approval policies and procedures for audit and non-audit work permitted to be carried out by the external auditor and has carefully monitored the objectivity and independence of the external auditor throughout 2008.

#### **Bureau Veritas**

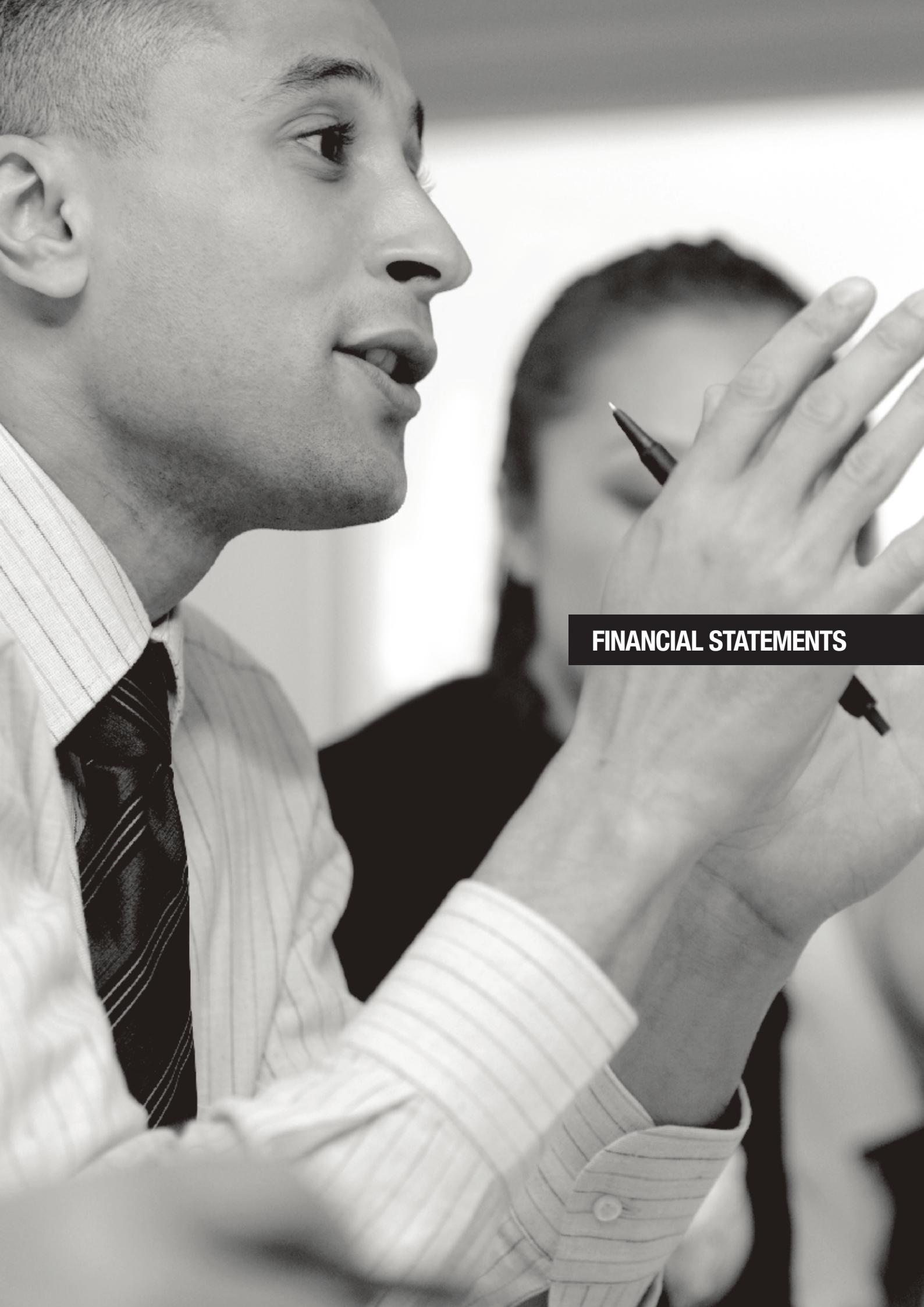
Bureau Veritas UK Limited has provided external assurance on corporate responsibility related information within this Annual Report and Form 20-F Information, and of the detailed content of the 'Responsibility' section of AstraZeneca's corporate website. Bureau Veritas has found the information provided within this Report to be accurate and reliable. The full assurance statement containing detailed scope, methodology, overall opinion and recommendations can be found on AstraZeneca's website, [astrazeneca.com](http://astrazeneca.com); web page content assured by Bureau Veritas is marked at the bottom of each page.

Bureau Veritas is an independent professional services company that specialises in Quality, Health, Safety, Social and Environmental Management with a long history in providing independent assurance services, and an annual turnover in 2007 of €2.06 billion.

On behalf of the Board

**A C N KEMP**  
**Company Secretary**

29 January 2009



**FINANCIAL STATEMENTS**

## 98 PREPARATION OF THE FINANCIAL STATEMENTS AND DIRECTORS' RESPONSIBILITIES

The Directors are responsible for preparing the Annual Report and Form 20-F Information and the Group and Company Financial Statements, in accordance with applicable law and regulations.

Company law requires the Directors to prepare Group and Company Financial Statements for each financial year. Under that law they are required to prepare the Group Financial Statements in accordance with IFRSs as adopted by the European Union (EU) and applicable law and have elected to prepare the Company Financial Statements in accordance with UK Accounting Standards and applicable law (UK Generally Accepted Accounting Practice).

The Group Financial Statements are required by law and IFRSs as adopted by the EU to present fairly the financial position and performance of the Group; the Companies Act 1985 provides in relation to such financial statements that references in the relevant part of that Act to financial statements giving a true and fair view are references to their achieving a fair presentation.

The Company has also elected to prepare the Group Financial Statements in accordance with IFRS as issued by the International Accounting Standards Board.

The Company Financial Statements are required by law to give a true and fair view of the state of affairs of the Company.

In preparing each of the Group and Company Financial Statements, the Directors are required to:

- > Select suitable accounting policies and then apply them consistently.
- > Make judgements and estimates that are reasonable and prudent.
- > For the Group Financial Statements, state whether they have been prepared in accordance with IFRSs as adopted by the EU.
- > For the Company Financial Statements, state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the Company Financial Statements.
- > Prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business.

The Directors are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its financial statements comply with the Companies Act 1985. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and the Company and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Directors' Report, Directors' Remuneration Report and Corporate Governance Statement that comply with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the UK governing the preparation and dissemination of Financial Statements may differ from legislation in other jurisdictions.

### DIRECTORS' RESPONSIBILITY STATEMENT PURSUANT TO DTR 4

The Directors confirm that to the best of our knowledge:

- > The Financial Statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole.
- > The Directors' Report includes a fair review of the development and performance of the business and the position of the issuer and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

On behalf of the Board of Directors on 29 January 2009:

DAVID R BRENNAN  
Director

## DIRECTORS' RESPONSIBILITIES FOR, AND REPORT ON, INTERNAL CONTROL OVER FINANCIAL REPORTING

The Directors are responsible for establishing and maintaining adequate internal control over financial reporting. AstraZeneca's internal control over financial reporting is designed to provide reasonable assurance over the reliability of financial reporting and the preparation of consolidated financial statements in accordance with generally accepted accounting principles.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risks that controls may

become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

The Directors assessed the effectiveness of AstraZeneca's internal control over financial reporting as at 31 December 2008 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework. Based on this assessment, the Directors believe that, as at 31 December 2008, the internal control over financial reporting is effective based on those criteria.

KPMG Audit Plc, an independent registered public accounting firm, has audited the effectiveness of internal control over financial reporting as at 31 December 2008 and, as explained on page 99, has issued an unqualified report thereon.

# AUDITOR'S REPORTS ON THE FINANCIAL STATEMENTS AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING (SARBANES-OXLEY ACT SECTION 404)

The report set out below is provided in compliance with International Standards on Auditing (UK and Ireland). KPMG Audit Plc has also issued reports in accordance with auditing standards of the Public Company Accounting Oversight Board in the US, which will be included in the Annual Report on Form 20-F to be filed with the US Securities and

Exchange Commission. Those reports are unqualified and include opinions on the Financial Statements and on the effectiveness of internal control over financial reporting as at 31 December 2008 (Sarbanes-Oxley Act Section 404). The Directors' statement on internal control over financial reporting is set out on page 98.

KPMG Audit Plc has also reported separately on the Company Financial Statements of AstraZeneca PLC and on the information in the Directors' Remuneration Report that is described as having been audited. This audit report is set out on page 165.

## INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ASTRAZENECA PLC

We have audited the Group Financial Statements of AstraZeneca PLC for the year ended 31 December 2008 which comprise the Consolidated Income Statement, the Consolidated Balance Sheet, the Consolidated Cash Flow Statement, the Consolidated Statement of Recognised Income and Expense and the related notes on pages 100 to 164. These Group Financial Statements have been prepared under the accounting policies set out therein.

We have reported separately on the Company Financial Statements of AstraZeneca PLC for the year ended 31 December 2008 and on the information in the Directors' Remuneration Report that is described as having been audited.

This report is made solely to the Company's members, as a body, in accordance with section 235 of the Companies Act 1985 and, in respect of the separate opinion in relation to International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board (IASB), on terms that have been agreed with the Company. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and, in respect of the separate opinion in relation to IFRSs as issued by the IASB, those matters that we have agreed to state to them in our report, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

### RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITORS

The Directors' responsibilities for preparing the Annual Report and Form 20-F Information and the Group Financial Statements in accordance with applicable law and IFRSs as adopted by the European Union (EU) are set out in the Statement of Directors' Responsibilities on page 98.

Our responsibility is to audit the Group Financial Statements in accordance with

relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the Group Financial Statements give a true and fair view and whether the Group Financial Statements have been properly prepared in accordance with the Companies Act 1985 and Article 4 of the IAS Regulation. We also report to you whether in our opinion the information given in the Directors' Report is consistent with the Group Financial Statements.

In addition we report to you if, in our opinion, we have not received all the information and explanations we require for our audit, or if information specified by law regarding Directors' remuneration and other transactions is not disclosed.

We review whether the Corporate Governance Statement reflects the Company's compliance with the nine provisions of the 2006 Combined Code specified for our review by the Listing Rules of the Financial Services Authority, and we report if it does not. We are not required to consider whether the Board's statements on internal control cover all risks and controls, or form an opinion on the effectiveness of the Group's corporate governance procedures or its risk and control procedures.

We read the other information contained in the Annual Report and Form 20-F Information and consider whether it is consistent with the audited Group Financial Statements. We consider the implications for our report if we become aware of any apparent mis-statements or material inconsistencies with the Group Financial Statements. Our responsibilities do not extend to any other information.

### BASIS OF AUDIT OPINION

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the Group Financial Statements. It also includes an assessment of the significant estimates and judgments made by the Directors in the preparation of the

Group Financial Statements, and of whether the accounting policies are appropriate to the Group's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Group Financial Statements are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the Group Financial Statements.

### OPINION

In our opinion:

- > The Group Financial Statements give a true and fair view, in accordance with IFRSs as adopted by the EU, of the state of the Group's affairs as at 31 December 2008 and of its profit for the year then ended.
- > The Group Financial Statements have been properly prepared in accordance with the Companies Act 1985 and Article 4 of the IAS Regulation.
- > The information given in the Directors' Report is consistent with the Group Financial Statements.

### SEPARATE OPINION IN RELATION TO IFRSs

As explained in the accounting policies set out in the Group Financial Statements, in addition to complying with its legal obligation to comply with IFRSs as adopted by the EU, the Group has also complied with IFRSs as issued by the IASB.

In our opinion the Group Financial Statements give a true and fair view, in accordance with IFRSs as issued by the IASB, of the state of the Group's affairs as at 31 December 2008 and of its profit for the year then ended.

**KPMG Audit Plc**  
Chartered Accountants  
Registered Auditor  
8 Salisbury Square  
London EC4Y 8BB  
29 January 2009

# 100 CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED 31 DECEMBER

	Notes	2008 \$m	2007 \$m	2006 \$m
<b>Revenue</b>		<b>31,601</b>	29,559	26,475
Cost of sales		(6,598)	(6,419)	(5,559)
<b>Gross profit</b>		<b>25,003</b>	23,140	20,916
Distribution costs		(291)	(248)	(226)
Research and development		(5,179)	(5,162)	(3,902)
Selling, general and administrative costs		(10,913)	(10,364)	(9,096)
Other operating income and expense	1	524	728	524
<b>Operating profit</b>	1	<b>9,144</b>	8,094	8,216
Finance income	2	854	959	888
Finance expense	2	(1,317)	(1,070)	(561)
<b>Profit before tax</b>		<b>8,681</b>	7,983	8,543
Taxation	3	(2,551)	(2,356)	(2,480)
<b>Profit for the period</b>		<b>6,130</b>	5,627	6,063
<b>Attributable to:</b>				
Equity holders of the Company		<b>6,101</b>	5,595	6,043
Minority interests		29	32	20
Basic earnings per \$0.25 Ordinary Share	4	\$4.20	\$3.74	\$3.86
Diluted earnings per \$0.25 Ordinary Share	4	\$4.20	\$3.73	\$3.85
Weighted average number of Ordinary Shares in issue (millions)	4	1,453	1,495	1,564
Diluted weighted average number of Ordinary Shares in issue (millions)	4	1,453	1,498	1,570
Dividends declared and paid in the period	21	2,767	2,658	2,217

All activities were in respect of continuing operations.

## CONSOLIDATED STATEMENT OF RECOGNISED INCOME AND EXPENSE FOR THE YEAR ENDED 31 DECEMBER

	Notes	2008 \$m	2007 \$m	2006 \$m
<b>Profit for the period</b>		<b>6,130</b>	5,627	6,063
Foreign exchange arising on consolidation		(1,336)	492	922
Foreign exchange differences on borrowings forming net investment hedges		291	(40)	–
Gain/(loss) on cash flow hedge in connection with debt issue		1	(21)	–
Available for sale gains/(losses) taken to equity		2	(9)	(20)
Actuarial loss for the period		(1,232)	(113)	(108)
Tax on items taken directly to reserves	3	368	33	137
<b>Income and expense recognised directly in equity</b>		<b>(1,906)</b>	342	931
<b>Total recognised income and expense for the period</b>	19	<b>4,224</b>	5,969	6,994
<b>Attributable to:</b>				
Equity holders of the Company	19	<b>4,176</b>	5,934	6,970
Minority interests	19	<b>48</b>	35	24

\$m means millions of US dollars.

## **CONSOLIDATED BALANCE SHEET AT 31 DECEMBER**

	Notes	2008 \$m	2007 \$m	2006 \$m
<b>Assets</b>				
<b>Non-current assets</b>				
Property, plant and equipment	7	7,043	8,298	7,453
Goodwill	8	9,874	9,884	1,097
Intangible assets	9	12,323	11,467	3,107
Other investments	10	156	182	119
Deferred tax assets	3	1,236	1,044	1,220
		30,632	30,875	12,996
<b>Current assets</b>				
Inventories	11	1,636	2,119	2,250
Trade and other receivables	12	7,261	6,668	5,561
Other investments	10	388	177	657
Income tax receivable		2,581	2,251	1,365
Cash and cash equivalents	13	4,286	5,867	7,103
		16,152	17,082	16,936
<b>Total assets</b>		46,784	47,957	29,932
<b>Liabilities</b>				
<b>Current liabilities</b>				
Interest bearing loans and borrowings	14	(993)	(4,280)	(136)
Trade and other payables	17	(7,178)	(6,968)	(6,295)
Provisions	18	(600)	(387)	(39)
Income tax payable		(4,549)	(3,552)	(2,977)
		(13,320)	(15,187)	(9,447)
<b>Non-current liabilities</b>				
Interest bearing loans and borrowings	14	(10,855)	(10,876)	(1,087)
Deferred tax liabilities	3	(3,126)	(4,119)	(1,559)
Retirement benefit obligations	23	(2,732)	(1,998)	(1,842)
Provisions	18	(542)	(633)	(327)
Other payables	17	(149)	(229)	(254)
		(17,404)	(17,855)	(5,069)
<b>Total liabilities</b>		(30,724)	(33,042)	(14,516)
<b>Net assets</b>		16,060	14,915	15,416
<b>Equity</b>				
<b>Capital and reserves attributable to equity holders of the Company</b>				
Share capital	20	362	364	383
Share premium account	19	2,046	1,888	1,671
Capital redemption reserve	19	94	91	71
Merger reserve	19	433	433	433
Other reserves	19	1,405	1,378	1,398
Retained earnings	19	11,572	10,624	11,348
		15,912	14,778	15,304
<b>Minority equity interests</b>	19	148	137	112
<b>Total equity</b>	19	16,060	14,915	15,416

The Financial Statements on pages 100 to 164 were approved by the Board of Directors on 29 January 2009 and were signed on its behalf by:

102 **CONSOLIDATED CASH FLOW STATEMENT  
FOR THE YEAR ENDED 31 DECEMBER**

	Notes	2008 \$m	2007 \$m	2006 \$m
<b>Cash flows from operating activities</b>				
Profit before tax		<b>8,681</b>	7,983	8,543
Finance income and expense	2	<b>463</b>	111	(327)
Depreciation, amortisation and impairment		<b>2,620</b>	1,856	1,345
Increase in trade and other receivables		<b>(1,032)</b>	(717)	(470)
Decrease in inventories		<b>185</b>	442	158
Increase/(decrease) in trade and other payables		<b>637</b>	(168)	420
Other non-cash movements		<b>87</b>	901	263
Cash generated from operations		<b>11,641</b>	10,408	9,932
Interest paid		<b>(690)</b>	(335)	(70)
Tax paid		<b>(2,209)</b>	(2,563)	(2,169)
<b>Net cash inflow from operating activities</b>		<b>8,742</b>	7,510	7,693
<b>Cash flows from investing activities</b>				
Acquisitions of business operations	22	<b>–</b>	(14,891)	(1,148)
Movement in short term investments and fixed deposits		<b>1</b>	894	1,120
Purchase of property, plant and equipment		<b>(1,095)</b>	(1,130)	(794)
Disposal of property, plant and equipment		<b>38</b>	54	35
Purchase of intangible assets		<b>(2,944)</b>	(549)	(545)
Disposal of intangible assets		<b>–</b>	–	661
Purchase of non-current asset investments		<b>(40)</b>	(35)	(17)
Disposal of non-current asset investments		<b>32</b>	421	68
Interest received		<b>149</b>	358	352
Payments made by subsidiaries to minority interests		<b>(37)</b>	(9)	(4)
<b>Net cash outflow from investing activities</b>		<b>(3,896)</b>	(14,887)	(272)
<b>Net cash inflow/(outflow) before financing activities</b>		<b>4,846</b>	(7,377)	7,421
<b>Cash flows from financing activities</b>				
Proceeds from issue of share capital		<b>159</b>	218	985
Re-purchase of shares		<b>(610)</b>	(4,170)	(4,147)
Issue of loans		<b>787</b>	9,692	–
Repayment of loans		<b>–</b>	(1,165)	–
Dividends paid		<b>(2,739)</b>	(2,641)	(2,220)
Movement in short term borrowings		<b>(3,959)</b>	4,117	16
<b>Net cash (outflow)/inflow from financing activities</b>		<b>(6,362)</b>	6,051	(5,366)
<b>Net (decrease)/increase in cash and cash equivalents in the period</b>		<b>(1,516)</b>	(1,326)	2,055
Cash and cash equivalents at beginning of the period		<b>5,727</b>	6,989	4,895
Exchange rate effects		<b>(88)</b>	64	39
<b>Cash and cash equivalents at the end of the period</b>	13	<b>4,123</b>	5,727	6,989

# ACCOUNTING POLICIES

## BASIS OF ACCOUNTING AND PREPARATION OF FINANCIAL INFORMATION

The Consolidated Financial Statements have been prepared under the historical cost convention, modified to include revaluation to fair value of certain financial instruments as described below, in accordance with the Companies Act 1985 and International Financial Reporting Standards (IFRSs) as adopted by the European Union ("adopted IFRS") in response to the IAS regulation (EC 1606/2002). The Consolidated Financial Statements also comply fully with IFRSs as issued by the International Accounting Standards Board. IFRIC 14 'IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction' has been adopted in the year which is considered early adoption under EU adopted IFRS. 'Reclassification of Financial Assets' amendments to IAS 39 'Financial Instruments: Recognition and Measurement' and IFRS 7 'Financial Instruments: Disclosures' has been issued and we have applied the principles of IFRIC 12 'Service Concession Arrangements'. Adoption of these new requirements has had no effect on the Consolidated Financial Statements.

The amendment to IAS 39 'Financial Instruments: Recognition and Measurement and IFRS 7 Financial Instruments: Disclosures Reclassification of Financial Assets' has been adopted but had no impact on the overall reported results.

The Company has elected to prepare the Company Financial Statements in accordance with UK Accounting Standards. These are presented on pages 166 to 171 and the accounting policies in respect of Company information are set out on page 167.

The Consolidated Financial Statements are presented in US dollars, which is the Company's functional currency.

In preparing their individual financial statements, the accounting policies of some overseas subsidiaries do not conform with adopted IFRSs. Therefore, where appropriate, adjustments are made in order to present the Group Financial Statements on a consistent basis.

## BASIS FOR PREPARATION OF FINANCIAL STATEMENTS ON A GOING CONCERN BASIS

Information on the business environment AstraZeneca operates in, including the factors underpinning the industry's future growth prospects, are included in the Directors' Report. Details of the product portfolio of the Group, our approach to

product development and our development pipeline are covered in detail with additional information by major product group in the Directors' Report.

The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Financial Review. In addition, Notes 15 and 16 to the Financial Statements includes the Group's objectives, policies and processes for managing its capital, its financial risk management objectives, details of its financial instruments and hedging activities and its exposures to credit, market and liquidity risk. Further details of the Group's cash balances and borrowings are included in Notes 13 and 14 of the Financial Statements.

The Group has considerable financial resources available. As at 31 December 2008, the Group has \$7.8 billion in financial resources (cash balances of \$4.3 billion and committed bank facilities of \$4.3 billion, with \$0.8 billion of debt due within one year). The Group's revenues are largely derived from sales of products which are covered by patents and for which, historically at least, demand has been relatively unaffected by changes in the general economy. In addition, the Group has a wide diversity of customers and suppliers across different geographic areas. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully despite the current uncertain economic outlook.

After making enquiries, the Directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Accordingly, they continue to adopt the going concern basis in preparing the Annual Report and Financial Statements.

## ESTIMATES AND JUDGEMENTS

The preparation of the Financial Statements in conformity with generally accepted accounting principles requires management to make estimates and judgements that affect the reported amounts of assets and liabilities at the date of the Financial Statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Judgements include classification of transactions between the income statement and balance sheet, whilst estimates focus on areas such as carrying values and estimated lives.

AstraZeneca's management considers the following to be the most important accounting policies in the context of the Group's operations.

The accounting policy descriptions set out the areas where judgement needs exercising, the most significant of which are revenue recognition, research and development, goodwill and intangible assets, litigation and environmental liabilities, post-retirement benefits, taxation and share-based compensation.

Further information on critical judgements made in applying accounting policies, including details of significant methods and assumptions used, is included in Notes 8, 9, 16, 22, 23, 24 and 25. The financial risk management policies are detailed in Note 15.

## REVENUE

Revenues exclude inter-company sales and value-added taxes and represent net invoice value less estimated rebates, returns and settlement discounts. Revenues are recognised when the significant risks and rewards of ownership have been transferred to a third party. In general this is upon delivery of the products to wholesalers. However, when a product faces generic competition particular attention is given to the possible levels of returns and, in cases where the circumstances are such that the level of returns (and, hence, revenue) cannot be measured reliably, revenues are only recognised when the right of return expires which is generally on ultimate prescription of the product to patients.

## RESEARCH AND DEVELOPMENT

Research expenditure is recognised in the income statement in the year in which it is incurred.

Internal development expenditure is capitalised only if it meets the recognition criteria of IAS 38 'Intangible Assets'. Where regulatory and other uncertainties are such that the criteria are not met the expenditure is recognised in the income statement. This is almost invariably the case prior to approval of the drug by the relevant regulatory authority. Where, however, the recognition criteria are met, intangible assets are capitalised and amortised on a straight-line basis over their useful economic lives from product launch. As at 31 December 2008, no amounts have met the recognition criteria. Payments to in-licence products and compounds from external third parties, generally taking the form of up-front payments and milestones, are capitalised and amortised, generally on a straight-line basis, over their useful economic lives from product launch. Under this policy, it is not possible to determine precise economic lives for individual classes of intangible assets. However, lives range from three years to twenty years.

Intangible assets relating to products in development (both internally generated and externally acquired) are subject to impairment testing at each balance sheet date. All intangible assets are tested for impairment when there are indications that the carrying value may not be recoverable. Any impairment losses are recognised immediately in the income statement.

#### **BUSINESS COMBINATIONS AND GOODWILL**

On the acquisition of a business, fair values are attributed to the identifiable assets and liabilities and contingent liabilities unless the fair value cannot be measured reliably in which case the value is subsumed into goodwill. Where fair values of acquired contingent liabilities cannot be measured reliably, the assumed contingent liability is not recognised but is disclosed in the same manner as other contingent liabilities. Goodwill is the difference between consideration paid and the fair value of net assets acquired.

Goodwill arising on acquisitions is capitalised and subject to an impairment review, both annually and when there is an indication that the carrying value may not be recoverable. Between 1 January 1998 and 31 December 2002, goodwill was amortised over its estimated useful life; such amortisation ceased on 31 December 2002.

The Group's policy up to and including 1997 was to eliminate goodwill arising upon acquisitions against reserves. Under IFRS 1 'First-time Adoption of International Financial Reporting Standards' and IFRS 3 'Business Combinations', such goodwill will remain eliminated against reserves.

#### **EMPLOYEE BENEFITS**

The Group accounts for pensions and other employee benefits (principally healthcare) under IAS 19 'Employee Benefits'. In respect of defined benefit plans, obligations are measured at discounted present value whilst plan assets are measured at fair value. The operating and financing costs of such plans are recognised separately in the income statement; current service costs are spread systematically over the lives of employees and financing costs are recognised in full in the periods in which they arise. Actuarial gains and losses are recognised immediately in the statement of recognised income and expense.

Where the calculation results in a benefit to the Group, the recognised asset is limited to the present value of any available future refunds from the plan or reductions in future contributions to the plan.

Payments to defined contribution plans are recognised in the income statement as they fall due.

#### **TAXATION**

The current tax payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the income statement because it excludes items that are never taxable or deductible. The Group's current tax assets and liabilities are calculated using tax rates that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax assets are recognised to the extent that it is probable that taxable profit will be available against which the asset can be utilised. This requires judgements to be made in respect of the availability of future taxable income.

No deferred tax asset or liability is recognised in respect of temporary differences associated with investments in subsidiaries, branches and joint ventures where the Group is able to control the timing of reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

The Group's deferred tax assets and liabilities are calculated using tax rates that are expected to apply in the period when the liability is settled or the asset realised based on tax rates that have been enacted or substantively enacted by the balance sheet date.

Accruals for tax contingencies require management to make judgements and estimates of ultimate exposures in relation to tax audit issues. Tax benefits are not recognised unless the tax positions will probably be sustained. Once considered to be probable, management reviews each material tax benefit to assess whether a provision should be taken against full recognition of that benefit on the basis of potential settlement through negotiation and/or litigation. All provisions are included in current liabilities. Any recorded exposure to interest on tax liabilities is provided for in the tax charge. (See Note 25 for further details.)

#### **SHARE-BASED PAYMENTS**

All plans are assessed and have been classified as equity settled. The grant date fair value of employee share option awards is generally calculated using the Black-Scholes

model. In accordance with IFRS 2 'Share-based Payment', the resulting cost is recognised in the income statement over the vesting period of the options, being the period in which the services are received. The value of the charge is adjusted to reflect expected and actual levels of awards vesting, except where the failure to vest is as a result of not meeting a market condition.

#### **PROPERTY, PLANT AND EQUIPMENT**

The Group's policy is to write off the difference between the cost of each item of property, plant and equipment and its residual value systematically over its estimated useful life. Assets under construction are not depreciated.

Reviews are made annually of the estimated remaining lives and residual values of individual productive assets, taking account of commercial and technological obsolescence as well as normal wear and tear. Under this policy it becomes impractical to calculate average asset lives exactly. However, the total lives range from approximately thirteen to fifty years for buildings, and three to fifteen years for plant and equipment. All items of property, plant and equipment are tested for impairment when there are indications that the carrying value may not be recoverable. Any impairment losses are recognised immediately in the income statement.

#### **BORROWING COSTS**

Borrowing costs are recognised in the income statement as incurred and in accordance with the effective interest rate method.

#### **LEASES**

Rentals under operating leases are charged to the income statement on a straight-line basis.

#### **SUBSIDIARIES**

A subsidiary is an entity controlled, directly or indirectly, by AstraZeneca. Control is regarded as the power to govern the financial and operating policies of the entity so as to obtain benefits from its activities.

The financial results of subsidiaries are consolidated from the date control is obtained until the date that control ceases.

#### **INVENTORIES**

Inventories are stated at the lower of cost or net realisable value. The first in, first out or an average method of valuation is used. For finished goods and work in progress, cost includes directly attributable costs and certain overhead expenses (including depreciation). Selling expenses and certain other overhead expenses (principally central administration costs) are excluded. Net realisable value is determined as estimated

selling price less all estimated costs of completion and costs to be incurred in selling and distribution.

Write downs of inventory occur in the general course of business and are included in cost of sales in the income statement.

#### TRADE AND OTHER RECEIVABLES

Trade and other receivables are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest rate method, less any impairment losses.

#### TRADE AND OTHER PAYABLES

Trade and other payables are recognised initially at fair value. Subsequent to initial recognition they are measured at amortised cost using the effective interest rate method.

#### FINANCIAL INSTRUMENTS

The Group's financial instruments include interests in leases and rights and obligations under employee benefit plans which are dealt with in specific accounting policies.

The Group's other financial instruments include:

- > Cash and cash equivalents
- > Fixed deposits
- > Other investments
- > Bank and other borrowings
- > Derivatives

#### CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise cash in hand, current balances with banks and similar institutions and highly liquid investments with maturities of three months or less when acquired. They are readily convertible into known amounts of cash and are held at amortised cost.

#### FIXED DEPOSITS

Fixed deposits, comprising principally funds held with banks and other financial institutions, are initially measured at fair value (including direct transaction costs) and are subsequently remeasured to amortised cost using the effective interest rate method at each balance sheet date. Changes in carrying value are recognised in the income statement.

#### OTHER INVESTMENTS

Where investments have been classified as held for trading, they are measured initially at fair value and subsequently at fair value. Changes in fair value are recognised in the income statement.

In all other circumstances, the investments are initially measured at fair value (including direct transaction costs) and are subsequently

remeasured to fair value at each balance sheet date. Changes in carrying value due to changes in exchange rates or impairments are recognised in the income statement. All other changes in fair value are recognised as income or expense directly in reserves. Impairments are recorded in the income statement when there is a decline in the value of an investment that is deemed to be other than temporary. On disposal of the investment, the cumulative income or expense recognised in reserves is recognised as part of the gain or loss on disposal in the income statement.

#### BANK AND OTHER BORROWINGS

The Group uses derivatives, principally interest rate swaps, to hedge the interest rate exposure inherent in a portion of its fixed interest rate debt. In such cases the Group will either designate the debt as fair value through profit or loss when certain criteria are met or as the hedged item under a fair value hedge.

If the debt instrument is designated as fair value through profit or loss, the debt is initially measured at fair value (with direct transaction costs being included in the income statement as an expense) and is remeasured to fair value at each balance sheet date with changes in carrying value being recognised in the income statement (along with changes in the fair value of the related derivative). Such a designation has been made where this significantly reduces an accounting mismatch which would result from recognising gains and losses on different bases.

If the debt is designated as the hedged item under a fair value hedge, the debt is initially measured at fair value (with direct transaction costs being amortised over the life of the bonds), and is remeasured for fair value changes in respect of the hedged risk at each balance sheet date with changes in carrying value being recognised in the income statement (along with changes in the fair value of the related derivative).

If certain criteria are met, non-US dollar denominated loans are designated as net investment hedges of foreign operations and exchange differences arising from the retranslation are recognised directly in reserves to the extent that the hedge is effective. All other exchange differences giving rise to changes in the carrying value of foreign currency loans and overdrafts are recognised in the income statement.

Other interest bearing loans are initially measured at fair value (including direct transaction costs) and are subsequently remeasured to amortised cost using the

effective interest rate method at each balance sheet date. Changes in carrying value are recognised in the income statement.

#### DERIVATIVES

Derivatives are initially measured at fair value (with direct transaction costs being included in the income statement as an expense) and are subsequently remeasured to fair value at each balance sheet date. Changes in carrying value are recognised in the income statement.

#### FOREIGN CURRENCIES

Foreign currency transactions, being transactions denominated in a currency other than an individual Group entity's functional currency, are translated into the respective functional currencies of individual Group entities at average rates for the relevant monthly accounting periods, which approximate to actual rates.

Monetary assets, arising from foreign currency transactions, are retranslated at exchange rates prevailing at the date of the balance sheet. Exchange gains and losses on loans and on short term foreign currency borrowings and deposits are included within net interest payable. Exchange differences on all other foreign currency transactions are taken to operating profit in the individual Group entity's accounting records.

Non-monetary items arising from foreign currency transactions are not retranslated in the individual Group entity's accounting records.

In the Consolidated Financial Statements, income statement items for Group entities with a functional currency other than US dollars, are translated into US dollars at average exchange rates, which approximate to actual rates, for the relevant accounting periods. Assets and liabilities are translated at US exchange rates prevailing at the date of the Group balance sheet. Exchange differences arising on consolidation are taken to equity via the statement of recognised income and expense.

Exchange differences arising on retranslation of net investments in subsidiaries and of foreign currency loans which hedge these net investments, are taken directly to equity via the statement of recognised income and expense in the Consolidated Financial Statements. Gains and losses accumulated in the translation reserve will be recycled to the income statement when the foreign operation is sold.

## LITIGATION AND ENVIRONMENTAL LIABILITIES

Through the normal course of business, AstraZeneca is involved in legal disputes, the settlement of which may involve cost to the Group. Provision is made where an adverse outcome is probable and associated costs, including related legal costs, can be estimated reliably. In other cases, appropriate disclosures are included.

Where it is considered that the Group is more likely than not to prevail, legal costs involved in defending the claim are charged to the income statement as they are incurred.

Where it is considered that the Group has a valid contract which provides the right to reimbursement (from insurance or otherwise) of legal costs and/or all or part of any loss incurred or for which a provision has been established, the best estimate of the amount expected to be received is recognised as an asset.

AstraZeneca is exposed to environmental liabilities relating to its past operations, principally in respect of soil and groundwater remediation costs. Provisions for these costs are made when there is a present obligation and where it is probable that expenditure on remedial work will be required and a reliable estimate can be made of the cost. Provisions are discounted where the effect is material.

## IMPAIRMENT

The carrying value of non-financial assets, other than inventories and deferred tax assets are reviewed at least annually to determine whether there is any indication of impairment. For goodwill, intangible assets under development and for any other assets where such indication exists, then the asset's recoverable amount is estimated based on the greater of its value in use and its fair value less cost to sell. In assessing value in use, the estimated future cash flows, adjusted for the risks specific to each asset, are discounted to their present value using a discount rate that reflects current market assessments of the time value of money and the general risks affecting the pharmaceutical industry. For the purpose of impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash flows of other assets. Impairment losses are recognised in the income statement.

## INTERNATIONAL ACCOUNTING TRANSITION

On transition to using adopted IFRS in the year ended 31 December 2005, the Company took advantage of several optional exemptions available in IFRS 1 'First-time Adoption of International Financial Reporting Standards'. The major impacts which are of continuing importance are detailed below:

- > Business combinations – IFRS 3 'Business Combinations' has been applied from 1 January 2003, the date of transition, rather than being applied fully retrospectively. As a result, the combination of Astra and Zeneca is still accounted for as a merger, rather than through purchase accounting. If purchase accounting had been adopted, Zeneca would have been deemed to have acquired Astra.
- > Cumulative exchange differences – the Group chose to set the cumulative exchange difference reserve at 1 January 2003 to zero.

## ACCOUNTING STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET ADOPTED

IFRS 8 'Operating Segments' was issued in November 2006. It requires the identification of operating segments based on internal reporting to the chief operating decision maker and extends the scope and disclosure requirements of IAS 14 'Segmental Reporting'. It is effective for annual periods beginning on or after 1 January 2009. The adoption of IFRS 8 will not have a significant impact upon the net results, net assets or disclosures of AstraZeneca.

A revised IAS 23 'Borrowing Costs' was issued in March 2007. It removes the option of immediately recognising as an expense borrowing costs that relate to assets that take a substantial period of time to prepare for use and therefore requires an entity to capitalise borrowing costs as part of the cost of such assets. The revised Standard is effective for annual periods beginning on or after 1 January 2009 and will be applied prospectively from that date. The adoption of these amendments to IAS 23 is not expected to have a material effect upon the net results or net assets of AstraZeneca going forward.

A revised IAS 1 'Presentation of Financial Statements' was issued in September 2007. It revises the presentation of non-owner changes in equity and introduces a statement of comprehensive income. It is effective for annual periods beginning on or after 1 January 2009. The adoption of these amendments to IAS 1 will not have a significant impact upon the net results or net assets of AstraZeneca.

Amendments to IAS 32 'Financial Instruments: Presentation' and IAS 1 'Presentation of Financial Statements – Puttable Financial Instruments and Obligations Arising on Liquidation' was issued in February 2008. The amendments require puttable instruments, and instruments that impose on the entity an obligation to deliver to another party a pro rata share of net assets of the entity only on liquidation, to be classified as equity if certain conditions are met. The amendments are effective for annual periods beginning on or after 1 January 2009 and will be applied retrospectively. Adoption of the amendments is not expected to have any impact upon the net results, net assets or disclosures of AstraZeneca.

A revised IFRS 3 'Business Combinations' was issued in January 2008. The following changes will be relevant to the Group's operations:

- > Contingent consideration will be measured at fair value, with subsequent changes to the fair value being recognised in the income statement.
- > Transaction costs, other than share and debt issue costs, will be expensed as incurred.
- > Any pre-existing interest in the acquiree will be measured at fair value with the gain or loss recognised in the income statement.
- > Any non-controlling (minority) interest will be measured at either fair value, or at its proportionate interest in the identifiable assets and liabilities of the acquiree, on a transaction by transaction basis.

The revised Standard is effective for business combinations on or after 1 January 2010 and will be applied prospectively from that date.

An amendment to IAS 27 'Consolidated and Separate Financial Statements (2008)' was issued in January 2008. The amendment requires changes in ownership interests in a subsidiary, while maintaining control, to be recognised as an equity transaction. If control of a subsidiary is lost, any retained interest is measured at fair value with the gain or loss recognised in the income statement. The amendment is effective for accounting periods beginning on or after 1 July 2009 and will not have a significant impact upon the net results, net assets or disclosures of AstraZeneca.

Amendments to IFRS 2 'Share-based Payment – Vesting Conditions and Cancellations' clarify the definition of vesting conditions and introduces the concept of non-vesting

conditions. The amendments are effective for accounting periods beginning on or after 1 January 2009 and are not expected to have a significant impact upon the net results, net assets or disclosures of AstraZeneca.

The amendment to IAS 39 'Financial Instruments: Recognition and Measurement: Eligible Hedged Items' deals with two situations where diversity in practice exists on the designation of inflation as a hedged risk and the treatment of 'one-sided' risks on hedged items. The amendment is effective for accounting periods beginning on or after 1 July 2009. The amendment is not expected to have a significant impact upon the net results, net assets or disclosures of AstraZeneca.

IFRS 8 'Operating Segments' was endorsed by the EU during 2007. The amendments to IAS 23, IAS 1 and IFRS 2 were endorsed by the EU in 2008. The remaining standards and amendments have not yet been endorsed by the EU.

The following IFRIC interpretations have been issued but are not yet adopted by AstraZeneca: IFRIC 13 'Customer Loyalty Programmes' and IFRIC 16 'Hedges of a Net Investment in a Foreign Operation'. The interpretations are effective for accounting periods commencing on 1 July 2008 and 1 October 2008 respectively. IFRIC 13 was endorsed by the EU in 2008. IFRIC 16 has yet to be endorsed by the EU. Neither interpretation is expected to have a significant impact upon adoption.

# 108 NOTES TO THE FINANCIAL STATEMENTS

## 1 OPERATING PROFIT

Operating profit includes the following items:

### OTHER OPERATING INCOME AND EXPENSE

	2008 \$m	2007 \$m	2006 \$m
Royalties <sup>1</sup>	113	236	327
Net gain on disposal of property, plant and equipment	6	9	2
Net loss on disposal of intangible assets	(17)	(1)	(1)
Gains on divestments of non-core products	118	192	161
Other income	304	310	115
Other expense	—	(18)	(80)
<b>Other operating income and expense</b>	<b>524</b>	<b>728</b>	<b>524</b>

<sup>1</sup> Royalty income is net of amortisation of intangible assets relating to royalty income streams and in 2008 the impairment of the HPV royalty intangible asset (\$91m).

### RESTRUCTURING AND SYNERGY COSTS

During 2008 the Group continued the restructuring and synergy programmes announced in 2007. In addition, the Group announced further programmes during the year. The tables below show the costs that have been charged in respect of these programmes to the income statement by cost category and type. Severance provisions are detailed in Note 18.

	2008 \$m	2007 \$m	2006 \$m
Cost of sales	405	415	—
Research and development	166	73	—
Selling, general and administrative expenses	310	478	—
<b>Total charge</b>	<b>881</b>	<b>966</b>	<b>—</b>

	2008 \$m	2007 \$m	2006 \$m
Severance costs	499	678	—
Accelerated depreciation and impairment	219	203	—
Other	163	85	—
<b>Total charge</b>	<b>881</b>	<b>966</b>	<b>—</b>

The total charge in respect of the Global Supply Chain productivity initiative is anticipated to be around \$1,250m.

In aggregate, research and development restructuring costs of around \$300m are expected.

The total charge in respect of selling and marketing and business infrastructure is anticipated to be around \$1,400m.

## 2 FINANCE INCOME AND EXPENSE

	2008 \$m	2007 \$m	2006 \$m
<b>Finance income</b>			
Returns on fixed deposits and equity securities	15	52	29
Returns on short-term deposits	127	298	330
Expected return on post-employment defined benefit plan assets	584	573	518
Fair value gains on debt, interest rate swaps and investments	128	36	11
<b>Total finance income</b>	<b>854</b>	<b>959</b>	<b>888</b>
<b>Finance expense</b>			
Interest on debt and commercial paper	(664)	(513)	(59)
Interest on overdrafts and other financing costs	(50)	(9)	(13)
Interest on post-employment defined benefit plan liabilities	(589)	(539)	(475)
Fair value charges on debt, interest rate swaps and investments	(2)	(6)	—
Net exchange losses	(12)	(3)	(14)
<b>Total finance expense</b>	<b>(1,317)</b>	<b>(1,070)</b>	<b>(561)</b>
<b>Net finance (expense)/income</b>	<b>(463)</b>	<b>(111)</b>	<b>327</b>

## 2 FINANCE INCOME AND EXPENSE CONTINUED

The amount of exchange gains and losses recognised in income, other than those arising on financial instruments measured at fair value through profit or loss in accordance with IAS 39 (see Note 16), is a loss of \$12m (2007: \$3m; 2006: \$14m).

## 3 TAXATION

Taxation recognised in the income statement is as follows:

	2008 \$m	2007 \$m	2006 \$m
<b>Current tax expense</b>			
Current year	2,946	1,890	2,431
Adjustment for prior years	130	261	270
	3,076	2,151	2,701
<b>Deferred tax expense</b>			
Origination and reversal of temporary differences	(486)	379	(81)
Adjustment to prior years	(39)	(174)	(140)
	(525)	205	(221)
<b>Total taxation expense in the income statement</b>	<b>2,551</b>	<b>2,356</b>	<b>2,480</b>

Taxation has been provided at current rates on the profits earned for the periods covered by the Group Financial Statements. The 2008, 2007 and 2006 prior period current tax adjustments relate mainly to tax accrual to tax return adjustments, an increase in provisions in respect of a number of transfer pricing audits and double tax relief. The 2008, 2007 and 2006 prior year deferred tax credits relate to tax accrual to tax return adjustments and the recognition of previously unrecognised deferred tax assets. To the extent that dividends remitted from overseas subsidiaries, joint ventures and associates are expected to result in additional taxes, appropriate amounts have been provided for. No deferred tax has been provided for unremitted earnings of Group companies overseas as these are considered permanently employed in the businesses of these companies. Unremitted earnings may be liable to overseas taxes and/or UK taxation (after allowing for double taxation relief) if they were to be distributed as dividends. The aggregate amount of temporary differences associated with investments in subsidiaries and branches for which deferred tax liabilities have not been recognised totalled approximately \$8,449m at 31 December 2008 (2007: \$12,639m; 2006: \$13,291m).

### CONSOLIDATED STATEMENT OF RECOGNISED INCOME AND EXPENSE

The current tax credit on consolidation exchange adjustments taken to reserves amounted to \$20m in 2008 (2007: \$32m; 2006: \$62m). The current tax credit on share-based payments amounted to \$nil (2007: \$1m; 2006: \$36m). The deferred tax credit taken to reserves amounted to \$348m in 2008 (2007: \$nil; 2006: \$39m).

### FACTORS AFFECTING FUTURE TAX CHARGES

As a group involved in worldwide operations, AstraZeneca is subject to several factors that may affect future tax charges, principally the levels and mix of profitability in different jurisdictions, transfer pricing regulations and tax rates imposed. A number of material items currently under audit and negotiation are set out in detail in Note 25.

### TAX RECONCILIATION TO UK STATUTORY RATE

The table shown below reconciles the UK statutory tax charge to the Group's total tax charge.

	2008 \$m	2007 \$m	2006 \$m
Profit before tax	8,681	7,983	8,543
Notional taxation charge at UK corporation tax rate of 28.5% <sup>1</sup> (30% for 2007, 30% for 2006)	2,474	2,395	2,563
Differences in effective overseas tax rates	(8)	(105)	(156)
Deferred tax income relating to reduction in Swedish, UK and other tax rates <sup>2</sup>	(70)	(57)	–
Unrecognised deferred tax asset	(7)	(1)	(6)
Items not deductible for tax purposes	119	70	58
Items not chargeable for tax purposes	(48)	(33)	(109)
Adjustments in respect of prior periods	91	87	130
<b>Total tax charge for the year</b>	<b>2,551</b>	<b>2,356</b>	<b>2,480</b>

<sup>1</sup> The UK statutory tax rate was reduced from 30% to 28% effective from 1 April 2008 resulting in the effective tax rate for the Group for 2008 being 28.5%.

<sup>2</sup> The 2008 item relates to the reduction in the Swedish statutory corporation tax rate from 28% to 26.3% effective from 1 January 2009. The majority of the 2007 item relates to the reduction in the UK statutory corporation tax rate referred to above.

### 3 TAXATION CONTINUED

#### DEFERRED TAX

Deferred tax assets and liabilities and the movements during the year, before offset of balances within countries, are as follows:

	Property, plant and equipment \$m	Intangible assets \$m	Pension and post- retirement benefits \$m	Inter- company inventory transfers \$m	Untaxed reserves <sup>1</sup> \$m	Accrued expenses \$m	Share schemes \$m	Deferred capital gains \$m	Losses and tax credits carried forward \$m	Other \$m	Total \$m	
Deferred tax assets at 1 January 2007	37	2	604	853	–	323	113	–	57	28	2,017	
Deferred tax liabilities at 1 January 2007	(502)	(819)	–	–	(881)	–	–	(99)	–	(55)	(2,356)	
<b>Net deferred tax balance at 1 January 2007<sup>2</sup></b>	<b>(465)</b>	<b>(817)</b>	<b>604</b>	<b>853</b>	<b>(881)</b>	<b>323</b>	<b>113</b>	<b>(99)</b>	<b>57</b>	<b>(27)</b>	<b>(339)</b>	
Income statement	(130)	201	(99)	(71)	(225)	190	(45)	12	(96)	58	(205)	
Statement of recognised income and expense	–	–	8	–	–	–	(8)	–	–	–	–	
Acquisition of subsidiary undertaking <sup>3</sup>	3	(2,973)	–	58	–	74	–	–	369	(29)	(2,498)	
Exchange	(35)	(5)	15	46	(65)	11	2	(1)	–	(1)	(33)	
<b>Net deferred tax balance at 31 December 2007<sup>2</sup></b>	<b>(627)</b>	<b>(3,594)</b>	<b>528</b>	<b>886</b>	<b>(1,171)</b>	<b>598</b>	<b>62</b>	<b>(88)</b>	<b>330</b>	<b>1</b>	<b>(3,075)</b>	
Deferred tax assets at 31 December 2007	66	59	531	907	–	611	62	–	330	71	2,637	
Deferred tax liabilities at 31 December 2007	(693)	(3,653)	(3)	(21)	(1,171)	(13)	–	(88)	–	(70)	(5,712)	
<b>Net deferred tax balance at 31 December 2007</b>	<b>(627)</b>	<b>(3,594)</b>	<b>528</b>	<b>886</b>	<b>(1,171)</b>	<b>598</b>	<b>62</b>	<b>(88)</b>	<b>330</b>	<b>1</b>	<b>(3,075)</b>	
Income statement	122	375	24	55	(119)	37	43	–	12	(24)	525	
Statement of recognised income and expense	–	–	340	–	–	–	9	–	–	(1)	348	
Exchange	168	130	(113)	(35)	199	(37)	(14)	24	(7)	(3)	312	
<b>Net deferred tax balance at 31 December 2008</b>	<b>(337)</b>	<b>(3,089)</b>	<b>779</b>	<b>906</b>	<b>(1,091)</b>	<b>598</b>	<b>100</b>	<b>(64)</b>	<b>335</b>	<b>(27)</b>	<b>(1,890)</b>	
Deferred tax assets at 31 December 2008	136	42	786	935	–	598	100	–	335	45	2,977	
Deferred tax liabilities at 31 December 2008	(473)	(3,131)	(7)	(29)	(1,091)	–	–	(64)	–	(72)	(4,867)	
<b>Net deferred tax balance at 31 December 2008</b>	<b>(337)</b>	<b>(3,089)</b>	<b>779</b>	<b>906</b>	<b>(1,091)</b>	<b>598</b>	<b>100</b>	<b>(64)</b>	<b>335</b>	<b>(27)</b>	<b>(1,890)</b>	
<b>Analysed in the balance sheet, after offset of balances within countries, as:</b>										2008 \$m	2007 \$m	2006 \$m
Deferred tax assets										1,236	1,044	1,220
Deferred tax liabilities										(3,126)	(4,119)	(1,559)
<b>Net deferred tax balance</b>										<b>(1,890)</b>	<b>(3,075)</b>	<b>(339)</b>

<sup>1</sup> Untaxed reserves relate to taxable profits where the tax liability is deferred to later periods.

<sup>2</sup> During 2008, the Group carried out a review of its deferred tax balances resulting in a reclassification of a deferred tax liability of \$284m from property, plant and equipment to intangible assets as at 31 December 2007 (\$328m as at 1 January 2007).

<sup>3</sup> The deferred tax liability of \$2,498m relates to MedImmune, Inc. and other acquisitions.

#### UNRECOGNISED DEFERRED TAX ASSETS

Deferred tax assets of \$80m have not been recognised in respect of deductible temporary differences (2007: \$106m; 2006: \$103m) because it is not probable that future taxable profit will be available against which the Group can utilise the benefits therefrom.

#### 4 EARNINGS PER \$0.25 ORDINARY SHARE

	2008	2007	2006
Profit for the financial year attributable to equity holders (\$m)	<b>6,101</b>	5,595	6,043
Basic earnings per Ordinary Share	<b>\$4.20</b>	\$3.74	\$3.86
Diluted earnings per Ordinary Share	<b>\$4.20</b>	\$3.73	\$3.85
Weighted average number of Ordinary Shares in issue for basic earnings (millions)	<b>1,453</b>	1,495	1,564
Dilutive impact of share options outstanding (millions)	–	3	6
Diluted weighted average number of Ordinary Shares in issue (millions)	<b>1,453</b>	1,498	1,570

There are no options, warrants or rights outstanding in respect of unissued shares except for employee share option schemes. The number of options outstanding and the weighted average exercise price of these options is shown in Note 24. The earnings figures used in the calculations above are post-tax and are unchanged for diluted earnings per Ordinary Share.

#### 5 SEGMENT INFORMATION

The Group's activities are in one business segment, pharmaceuticals. There are no other significant classes of business, either singularly or in aggregate.

##### GEOGRAPHIC AREAS

The tables below show information by geographic area and, for revenue and property, plant and equipment, material countries. The figures show the revenue, operating profit and profit before tax made by companies located in that area/country, together with segment assets, segment assets acquired, net operating assets and property, plant and equipment owned by the same companies; export sales and the related profit are included in the area/country from which those sales were made.

	Revenue		
	2008 \$m	2007 \$m	2006 \$m
<b>UK</b>			
External	<b>1,910</b>	1,981	1,686
Intra-Group	<b>8,460</b>	6,506	6,123
	<b>10,370</b>	8,487	7,809
<b>Continental Europe</b>			
Belgium	<b>380</b>	387	344
France	<b>1,945</b>	1,806	1,641
Germany	<b>1,225</b>	1,164	1,113
Italy	<b>1,145</b>	1,111	1,075
Spain	<b>832</b>	840	723
Sweden	<b>1,135</b>	985	843
Others	<b>2,696</b>	2,291	1,929
Intra-Group	<b>3,895</b>	4,123	4,314
	<b>13,253</b>	12,707	11,982
<b>The Americas</b>			
Canada	<b>1,269</b>	1,145	1,031
US	<b>13,657</b>	13,404	12,381
Others	<b>1,155</b>	872	673
Intra-Group	<b>1,169</b>	786	351
	<b>17,250</b>	16,207	14,436
<b>Asia, Africa &amp; Australasia</b>			
Australia	<b>763</b>	631	481
Japan	<b>1,861</b>	1,585	1,433
China	<b>627</b>	403	224
Others	<b>1,001</b>	954	898
Intra-Group	<b>78</b>	56	49
	<b>4,330</b>	3,629	3,085
Continuing operations	<b>45,203</b>	41,030	37,312
Intra-Group eliminations	<b>(13,602)</b>	(11,471)	(10,837)
	<b>31,601</b>	29,559	26,475

Export sales from the UK totalled \$9,439m for the year ended 31 December 2008 (2007: \$7,546m; 2006: \$7,012m).

Intra-Group pricing is determined on an arm's length basis.

## 5 SEGMENT INFORMATION CONTINUED

Profit from	Operating profit			Profit before tax		
	2008 \$m	2007 \$m	2006 \$m	2008 \$m	2007 \$m	2006 \$m
UK	<b>2,907</b>	2,060	1,852	<b>2,612</b>	1,828	1,936
Continental Europe	<b>3,136</b>	2,894	3,648	<b>3,233</b>	2,964	3,700
The Americas	<b>2,705</b>	2,734	2,437	<b>2,440</b>	2,781	2,627
Asia, Africa & Australasia	<b>396</b>	406	279	<b>396</b>	410	280
Continuing operations	<b>9,144</b>	8,094	8,216	<b>8,681</b>	7,983	8,543

	Total assets		
	2008 \$m	2007 \$m	2006 \$m
UK	<b>9,270</b>	12,003	13,346
Continental Europe	<b>6,229</b>	7,311	6,937
The Americas	<b>26,215</b>	24,175	6,334
Asia, Africa & Australasia	<b>2,489</b>	2,217	1,950
Income tax receivable	<b>2,581</b>	2,251	1,365
Continuing operations	<b>46,784</b>	47,957	29,932

	Assets acquired <sup>1</sup>			Net operating assets <sup>2</sup>		
	2008 \$m	2007 \$m	2006 \$m	2008 \$m	2007 \$m	2006 \$m
UK	<b>440</b>	929	2,282	<b>4,234</b>	5,043	4,977
Continental Europe	<b>295</b>	624	440	<b>3,683</b>	4,972	4,820
The Americas	<b>3,252</b>	17,858	292	<b>21,033</b>	19,742	2,081
Asia, Africa & Australasia	<b>67</b>	48	50	<b>1,732</b>	1,510	1,270
Continuing operations	<b>4,054</b>	19,459	3,064	<b>30,682</b>	31,267	13,148

<sup>1</sup> Included in 'assets acquired' are those assets that are expected to be used during more than one period (property, plant and equipment, goodwill and intangible assets).

<sup>2</sup> 'Net operating assets' exclude short-term investments, cash, short-term borrowings, loans, retirement benefit obligations and non-operating receivables and payables.

	Property, plant and equipment		
	2008 \$m	2007 \$m	2006 \$m
UK	<b>1,750</b>	2,490	2,508
Sweden	<b>1,722</b>	2,204	2,104
US	<b>2,200</b>	1,915	1,172
Rest of the world	<b>1,371</b>	1,689	1,669
Continuing operations	<b>7,043</b>	8,298	7,453

## GEOGRAPHIC MARKETS

The table below shows revenue in each geographic market in which customers are located.

	2008 \$m	2007 \$m	2006 \$m
UK	<b>994</b>	1,003	850
Continental Europe	<b>9,937</b>	9,138	8,053
The Americas	<b>15,945</b>	15,459	14,213
Asia, Africa & Australasia	<b>4,725</b>	3,959	3,359
Continuing operations	<b>31,601</b>	29,559	26,475

## 6 PRODUCT REVENUE INFORMATION

	2008 \$m	2007 \$m	2006 \$m
<b>Gastrointestinal:</b>			
Nexium	5,200	5,216	5,182
Losec/Prilosec	1,055	1,143	1,371
Others	89	84	78
Total Gastrointestinal	6,344	6,443	6,631
<b>Cardiovascular:</b>			
Crestor	3,597	2,796	2,028
Seloken/Toprol-XL	807	1,438	1,795
Atacand	1,471	1,287	1,110
Zestril	236	295	307
Plendil	268	271	275
Others	584	599	603
Total Cardiovascular	6,963	6,686	6,118
<b>Respiratory:</b>			
Symbicort	2,004	1,575	1,184
Pulmicort	1,495	1,454	1,292
Rhinocort	322	354	360
Oxis	71	86	88
Others	236	242	227
Total Respiratory	4,128	3,711	3,151
<b>Oncology:</b>			
Arimidex	1,857	1,730	1,508
Casodex	1,258	1,335	1,206
Zoladex	1,138	1,104	1,008
Iressa	265	238	237
Faslodex	249	214	186
Nolvadex	85	83	89
Abraxane®	64	62	18
Ethyol	28	43	—
Others	10	10	10
Total Oncology	4,954	4,819	4,262
<b>Neuroscience:</b>			
Seroquel	4,452	4,027	3,416
Local anaesthetics	605	557	529
Zomig	448	434	398
Diprivan	278	263	304
Others	54	59	57
Total Neuroscience	5,837	5,340	4,704
<b>Infection and Other:</b>			
Merrem	897	773	604
Synagis	1,230	618	—
FluMist	104	53	—
Other Products	220	270	271
Total Infection and Other	2,451	1,714	875
Aptium Oncology	395	402	374
Astra Tech	529	444	360
<b>Total</b>	<b>31,601</b>	<b>29,559</b>	<b>26,475</b>

## 7 PROPERTY, PLANT AND EQUIPMENT

	Land and buildings \$m	Plant and equipment \$m	Assets in course of construction \$m	Total property, plant and equipment \$m
<b>Cost</b>				
<b>At 1 January 2006</b>	4,490	8,035	480	13,005
Capital expenditure	23	196	577	796
Additions through business combinations	–	26	–	26
Transfer of assets into use	154	494	(648)	–
Disposals and other movements	(35)	(300)	(3)	(338)
Exchange adjustments	450	912	57	1,419
<b>At 31 December 2006</b>	<b>5,082</b>	<b>9,363</b>	<b>463</b>	<b>14,908</b>
Capital expenditure	53	304	812	1,169
Additions through business combinations	302	122	176	600
Transfer of assets into use	151	470	(621)	–
Disposals and other movements	(23)	(555)	(16)	(594)
Exchange adjustments	254	470	28	752
<b>At 31 December 2007</b>	<b>5,819</b>	<b>10,174</b>	<b>842</b>	<b>16,835</b>
Capital expenditure	49	239	825	1,113
Transfer of assets into use	275	404	(679)	–
Disposals and other movements	(123)	(558)	(25)	(706)
Exchange adjustments	(803)	(1,725)	(100)	(2,628)
<b>At 31 December 2008</b>	<b>5,217</b>	<b>8,534</b>	<b>863</b>	<b>14,614</b>
<b>Depreciation</b>				
<b>At 1 January 2006</b>	1,320	4,700	–	6,020
Charge for year	203	747	–	950
Impairment	6	47	–	53
Disposals and other movements	(21)	(277)	–	(298)
Exchange adjustments	148	582	–	730
<b>At 31 December 2006</b>	<b>1,656</b>	<b>5,799</b>	<b>–</b>	<b>7,455</b>
Charge for year	227	849	–	1,076
Impairment	39	65	2	106
Disposals and other movements	(3)	(498)	(1)	(502)
Exchange adjustments	96	306	–	402
<b>At 31 December 2007</b>	<b>2,015</b>	<b>6,521</b>	<b>1</b>	<b>8,537</b>
Charge for year	247	812	–	1,059
Impairment	91	32	–	123
Disposals and other movements	(120)	(529)	(2)	(651)
Exchange adjustments	(303)	(1,192)	(2)	(1,497)
<b>At 31 December 2008</b>	<b>1,930</b>	<b>5,644</b>	<b>(3)</b>	<b>7,571</b>
<b>Net book value</b>				
At 31 December 2006	3,426	3,564	463	7,453
At 31 December 2007	3,804	3,653	841	8,298
<b>At 31 December 2008</b>	<b>3,287</b>	<b>2,890</b>	<b>866</b>	<b>7,043</b>

Impairment charges in 2008 are attributable to the productivity initiatives in the global supply chain in France and research and development in Canada. These costs were recognised in cost of sales and research and development in the income statement.

Impairment charges in 2007 are attributable to the productivity initiatives in the global supply chain in Germany and the write-down of business support assets. These costs were recognised in cost of sales and general and administrative expenses in the income statement.

Impairment charges in 2006 are attributable to the write-down of assets in relation to the termination of NXY-059 and the write-down of assets in association with *Toprol-XL*, resulting from the introduction of generic competition in the US. The charges were recognised in cost of sales in the income statement.

## 7 PROPERTY, PLANT AND EQUIPMENT CONTINUED

	2008 \$m	2007 \$m	2006 \$m
The net book value of land and buildings comprised:			
Freeholds	3,287	3,804	3,421
Short leases	—	—	5
	3,287	3,804	3,426

## 8 GOODWILL

	2008 \$m	2007 \$m	2006 \$m
<b>Cost</b>			
<b>At 1 January</b>	<b>10,225</b>	1,430	1,280
Additions through business combinations	—	8,757	116
Exchange adjustments	(14)	38	34
<b>At 31 December</b>	<b>10,211</b>	10,225	1,430
<b>Amortisation and impairment losses</b>			
<b>At 1 January</b>	<b>341</b>	333	327
Exchange adjustments	(4)	8	6
<b>At 31 December</b>	<b>337</b>	341	333
<b>Net book value at 31 December</b>	<b>9,874</b>	9,884	1,097

## SIGNIFICANT ASSETS

	Description	Carrying value \$m	Remaining amortisation period
Goodwill arising from the acquisition of MedImmune	Goodwill	8,757	Not amortised
Goodwill in the US	Goodwill	707	Not amortised

For the purpose of impairment testing of goodwill, the Group is regarded as a single cash-generating unit.

The recoverable amount is based on value in use using discounted risk-adjusted projections of the Group's pre-tax cash flows over 10 years, a period reflecting the average patent-protected lives of our current products. The projections include assumptions about product launches, competition from rival products and pricing policy as well as the possibility of generics entering the market. In setting these assumptions we consider our past experience, external sources of information (including information on expected increases and ageing of the populations in our established markets and the expanding patient population in newer markets), our knowledge of competitor activity and our assessment of future changes in the pharmaceutical industry. The 10 year period is covered by internal budgets and forecasts. Given that internal budgets and forecasts are prepared for all projections, no general growth rates are used to extrapolate internal budgets and forecasts for the purposes of determining value in use. No terminal value is included as the cash flows are more than sufficient to establish whether an impairment exists.

In arriving at value in use, we disaggregate our projected pre-tax cash flows into groups reflecting similar risks and tax effects. For each group of cash flows we use an appropriate discount rate reflecting those risks and tax effects. In arriving at the appropriate discount rate for each group of cash flows, we adjust AstraZeneca's post-tax weighted average cost of capital (7.6% for 2008) to reflect the impact of risks and tax effects. The weighted average pre-tax discount rate we used was approximately 11%.

As a cross check, we compare our market capitalisation to the book value of our net assets and this indicates significant surplus at 31 December 2008.

No goodwill impairment was identified.

The Group has also performed sensitivity analysis calculations on the projections used and discount rate applied. The Directors have concluded that, given the significant headroom that exists, and the results of the sensitivity analysis performed, there is no significant risk that reasonable changes in any key assumptions would cause the carrying value of goodwill to exceed its value in use.

## 9 INTANGIBLE ASSETS

	Product, marketing and distribution rights \$m	Other intangibles \$m	Software development costs \$m	Total \$m
<b>Cost</b>				
<b>At 1 January 2006</b>	2,803	503	649	3,955
Additions – through business combinations	1,260	281	–	1,541
Additions – separately acquired	413	51	121	585
Disposals	(675)	(4)	–	(679)
Exchange adjustments	372	79	16	467
<b>At 31 December 2006</b>	<b>4,173</b>	<b>910</b>	<b>786</b>	<b>5,869</b>
Additions – through business combinations	6,946	1,477	–	8,423
Additions – separately acquired	299	33	178	510
Disposals	(52)	(82)	–	(134)
Exchange adjustments	183	47	12	242
<b>At 31 December 2007</b>	<b>11,549</b>	<b>2,385</b>	<b>976</b>	<b>14,910</b>
Additions – separately acquired	2,743	20	178	2,941
Disposals	–	(33)	(30)	(63)
Exchange adjustments	(770)	(197)	(133)	(1,100)
<b>At 31 December 2008</b>	<b>13,522</b>	<b>2,175</b>	<b>991</b>	<b>16,688</b>
<b>Amortisation and impairment losses</b>				
<b>At 1 January 2006</b>	<b>1,433</b>	<b>357</b>	<b>406</b>	<b>2,196</b>
Amortisation for year	250	25	50	325
Disposals	(14)	(4)	–	(18)
Impairment	–	17	–	17
Exchange adjustments	190	48	4	242
<b>At 31 December 2006</b>	<b>1,859</b>	<b>443</b>	<b>460</b>	<b>2,762</b>
Amortisation for year	364	112	78	554
Disposals	(52)	(81)	–	(133)
Impairment	98	22	–	120
Exchange adjustments	104	32	4	140
<b>At 31 December 2007</b>	<b>2,373</b>	<b>528</b>	<b>542</b>	<b>3,443</b>
Amortisation for year	529	182	96	807
Disposals	–	(9)	(10)	(19)
Impairment	516	91	24	631
Exchange adjustments	(357)	(104)	(36)	(497)
<b>At 31 December 2008</b>	<b>3,061</b>	<b>688</b>	<b>616</b>	<b>4,365</b>
<b>Net book value</b>				
At 31 December 2006	2,314	467	326	3,107
At 31 December 2007	9,176	1,857	434	11,467
<b>At 31 December 2008</b>	<b>10,461</b>	<b>1,487</b>	<b>375</b>	<b>12,323</b>

Other intangibles consist mainly of licensing and rights to contractual income streams.

#### ADDITIONS IN THE YEAR

Included in additions in the year is an amount of \$2.6bn for a payment made to Merck & Co., Inc ('Merck'). The payments consisted of payments for product rights and non-refundable deposits. Further details of this payment, including the background to the transaction and further payments that may be made under the agreements between AstraZeneca and Merck are included in Note 25.

## 9 INTANGIBLE ASSETS CONTINUED

Amortisation charges are recognised in the income statement as follows:

	Product, marketing and distribution rights \$m	Other intangibles \$m	Software development costs \$m	Total \$m
<b>Year ended 31 December 2008</b>				
Cost of sales	39	–	–	39
Research and development	10	–	–	10
Selling, general and administrative costs	480	35	96	611
Other operating income and expense	–	147	–	147
	529	182	96	807
<b>Year ended 31 December 2007</b>				
Selling, general and administrative costs	364	27	78	469
Other operating income and expense	–	85	–	85
	364	112	78	554
<b>Year ended 31 December 2006</b>				
Selling, general and administrative costs	250	13	50	313
Other operating income and expense	–	12	–	12
	250	25	50	325

Impairment charges are recognised in the income statement as follows:

	Product, marketing and distribution rights \$m	Other intangibles \$m	Software development costs \$m	Total \$m
<b>Year ended 31 December 2008</b>				
Cost of sales	115	–	–	115
Research and development	144	–	–	144
Selling, general and administrative costs	257	–	24	281
Other operating income and expense	–	91	–	91
	516	91	24	631
<b>Year ended 31 December 2007</b>				
Research and development	98	22	–	120
<b>Year ended 31 December 2006</b>				
Research and development	–	17	–	17

### Amortisation and impairment charges

The 2008 impairment of product, marketing and distribution rights result, in part, from the settlement of the *Pulmicort Respules* patent litigation with Teva (\$115m) and the "at risk" launch of a generic competitor to *Ethyol* (\$257m). The write down in value of the intangible assets in relation to these products was determined based on value in use calculations using discounted risk-adjusted projections of the expected products' cash flows over a period reflecting the patent-protected lives of the individual products. The full period of projections are covered by internal budgets and forecasts. In arriving at the appropriate discount rate to use for each product, we adjust AstraZeneca's post-tax weighted average cost of capital (7.6% for 2008) to reflect the impact of risks and tax effects specific to the individual products. The weighted average pre-tax discount rate we used was approximately 14%.

The remaining \$144m impairment of product, marketing and distribution rights results from the termination of development projects during the year.

The 2008 impairment of other intangibles results from a reassessment of the future royalties expected to be received relating to the HPV cervical cancer vaccine. This impairment charge was determined using value in use calculations applying the same considerations as applied to the write down of *Pulmicort Respules* and *Ethyol* detailed above.

The impairment in 2007 was in relation to the termination of a product in development acquired with MedImmune and four collaboration agreements.

The impairment in 2006 was in relation to the termination of NXY-059 and a collaboration agreement.

## 9 INTANGIBLE ASSETS CONTINUED

### SIGNIFICANT ASSETS

	Description	Carrying value \$m	Remaining amortisation period
Intangible assets arising from joint venture with Merck <sup>1</sup>	Product, marketing and distribution rights	262	5 and 9 years
Advance payment <sup>1</sup>	Product, marketing and distribution rights	528	10 years
Partial retirement (non-refundable deposit) <sup>1</sup>	Product, marketing and distribution rights	1,656	Not amortised
Partial retirement <sup>1</sup>	Product, marketing and distribution rights	840	13-19 years
Intangible assets arising from the acquisition of CAT	Product, marketing and distribution rights	398	7 and 12 years <sup>2</sup>
Intangible assets arising from the acquisition of KuDOS	Product, marketing and distribution rights	285	Not amortised <sup>2</sup>
RSV franchise assets arising on acquisition of MedImmune <sup>3</sup>	Product, marketing and distribution rights	5,161	17-23 years <sup>2</sup>
Intangible assets arising from the acquisition of MedImmune <sup>3</sup>	Licensing and contractual income	1,103	1-12 years

<sup>1</sup> These assets are associated with the restructuring of the joint venture with Merck & Co., Inc. Further information can be found in Note 25.

<sup>2</sup> Assets in development are not amortised but are tested annually for impairment.

<sup>3</sup> An allocation of the cost of these assets to Therapy Area is given in Note 22.

## 10 OTHER INVESTMENTS

	2008 \$m	2007 \$m	2006 \$m
<b>Non-current investments</b>			
Loans and receivables at fair value through profit or loss	—	—	37
Equity securities available for sale	156	182	82
	156	182	119
<b>Current investments</b>			
Equity securities held for trading	50	31	26
Fixed deposits	54	60	559
Derivative financial instruments	284	86	72
	388	177	657

Impairment charges of \$25m in respect of available for sale securities are included in other operating income and expense in the income statement (2007: \$18m; 2006: \$nil).

## 11 INVENTORIES

	2008 \$m	2007 \$m	2006 \$m
Raw materials and consumables	409	579	541
Inventories in process	631	806	778
Finished goods and goods for re-sale	596	734	931
	1,636	2,119	2,250

Inventory write-offs in the year amounted to \$51m (2007: \$95m; 2006: \$137m).

## 12 TRADE AND OTHER RECEIVABLES

	2008 \$m	2007 \$m	2006 \$m
<b>Amounts due within one year</b>			
Trade receivables	5,657	5,415	4,340
Less: Amounts provided for doubtful debts (Note 16)	(99)	(89)	(52)
	5,558	5,326	4,288
Other receivables	978	593	462
Prepayments and accrued income	552	510	578
	7,088	6,429	5,328
<b>Amounts due after more than one year</b>			
Other receivables	44	54	44
Prepayments and accrued income	129	185	189
	173	239	233
	7,261	6,668	5,561

## 13 CASH AND CASH EQUIVALENTS

	2008 \$m	2007 \$m	2006 \$m
Cash at bank and in hand	1,039	1,403	684
Short-term deposits	3,247	4,464	6,419
<b>Cash and cash equivalents</b>	<b>4,286</b>	<b>5,867</b>	<b>7,103</b>
Unsecured bank overdrafts	(163)	(140)	(114)
<b>Cash and cash equivalents in the cash flow statement</b>	<b>4,123</b>	<b>5,727</b>	<b>6,989</b>

The Group's insurance subsidiaries hold cash and short-term investments totalling \$400m (2007: \$347m; 2006: \$320m), of which \$278m (2007: \$257m; 2006: \$220m) is required to meet insurance solvency requirements and which, as a result, is not readily available for the general purposes of the Group.

## 14 INTEREST BEARING LOANS AND BORROWINGS

	Repayment dates	2008 \$m	2007 \$m	2006 \$m
<b>Current liabilities</b>				
Bank overdrafts	On demand	163	140	114
Floating Rate Note	US dollars	2009	650	—
Other loans		Within one year	180	4,140
			993	4,280
<b>Non-current liabilities</b>				
Floating Rate Note	US dollars	2009	—	649
4.625% Non-callable bond	Euros	2010	1,053	1,099
5.625% Non-callable bond	Euros	2010	702	—
5.4% Callable bond	US dollars	2012	1,823	1,765
5.4% Callable bond	US dollars	2014	789	767
5.125% Non-callable bond	Euros	2015	1,051	1,099
5.9% Callable bond	US dollars	2017	1,896	1,768
7% Guaranteed debentures	US dollars	2023	324	323
5.75% Non-callable bond	Pounds sterling	2031	501	691
6.45% Callable bond	US dollars	2037	2,716	2,715
			10,855	10,876
				1,087

All loans and borrowings above are unsecured.

## 15 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES

The Group's principal financial instruments, other than derivatives, comprise bank overdrafts, loans, current and non-current investments, cash and short-term deposits. The main purpose of these financial instruments is to manage the Group's funding and liquidity requirements. The Group has other financial assets and liabilities such as trade receivables and trade payables, which arise directly from its operations.

The principal financial risks to which the Group is exposed are those of liquidity, interest rate, foreign currency and credit. Each of these are managed in accordance with Board-approved policies. These policies are set out below.

The Group uses foreign currency borrowings, foreign currency forwards and options, interest rate swaps and forward rate agreements for the purpose of hedging its foreign currency and interest rate risks. The Group may designate certain financial instruments as either fair value hedges or net investment hedges in accordance with IAS 39. Key controls, applied to transactions in derivative financial instruments, are to use only instruments where good market liquidity exists, to revalue all financial instruments regularly using current market rates and to sell options only to offset previously purchased options. The Group does not use derivative financial instruments for speculative purposes.

### CAPITAL MANAGEMENT

The capital structure of the Group consists of shareholders' equity (Note 20), debt (Note 14) and cash (Note 13). For the foreseeable future, the Board will maintain a capital structure that supports the Group's strategic objectives through:

- > Managing funding and liquidity risk.
- > Optimising shareholder return.
- > Maintaining a strong investment grade rating.

Funding and liquidity risk are reviewed regularly by the Board and managed in accordance with policies described below.

The Board's distribution policy comprises both a regular cash dividend and, subject to business needs, a share re-purchase component. The Board regularly reviews its shareholders' return strategy, and in 2008 reaffirmed the dividend policy, which is to grow dividends in line with reported earnings before restructuring and synergy costs, with an aim to maintain at least two times dividend cover. The Board also initially stated an intention to re-purchase \$1bn of shares in 2008, subject to business needs. Actual re-purchases in 2008 were \$610m as the Board decided in quarter three that no further share re-purchases should take place in 2008 in order to maintain flexibility to invest in the business.

Following the debt financed acquisition of MedImmune in 2007, the Group has been reducing debt and during 2008 has reduced outstanding debt by \$3.3bn to \$11.8bn at the end of the year. The Group's policy is to manage its debt level so as to maintain a strong investment grade credit rating. The Group's current long-term credit rating is A1 by Moody's and AA- by Standard and Poor's, both with a stable outlook.

### LIQUIDITY RISK

The Board reviews the Group's ongoing liquidity risks annually as part of the planning process and on an ad hoc basis. The Board considers short-term requirements against available sources of funding taking into account cash flow. The Group manages liquidity risk by maintaining access to a number of sources of funding, which are sufficient to meet anticipated funding requirements. Specifically, the Group uses US commercial paper, committed bank facilities and cash resources to manage short-term liquidity and manages long-term liquidity by raising funds through the capital markets.

In addition to cash balances (comprising fixed deposits, cash and cash equivalents less overdrafts) of \$4,177m, the Group has committed bank facilities of \$4.3bn available to manage liquidity. As at 31 December 2008, the Group has issued \$3,307m under an EMTN programme, \$7,874m under a SEC-registered shelf, \$324m under a previous SEC-registered programme and has \$163m of commercial paper outstanding. The Company regularly monitors the credit standing of the banking group and currently does not anticipate any issue with drawing on the committed facilities should this be necessary. The committed facilities were undrawn as at 31 December 2008.

In 2008, the Group issued a €500m 18 month bond under the EMTN programme to re-finance maturing commercial paper. The \$3.35bn five year committed facilities maturing in October 2012 were increased to \$3.6bn and \$0.7bn of the \$1.8bn 364 day committed facilities, which matured in October 2008, were renewed for a further 364 day term.

### MARKET RISK

#### Interest rate risk

The Group maintains a mix of fixed and floating rate debt. The portion of fixed rate debt was approved by the Board and any variation requires Board approval. A significant portion of the long-term debt entered into in 2007 has been held at fixed rates of interest. The Group uses interest rate swaps and forward rate agreements to manage this mix.

As at 31 December 2008, the Group held interest rate swaps with a notional value of \$2.5bn, converting the 5.4% callable bond maturing in 2014, and the 7% guaranteed debentures payable in 2023 to floating rates and partially converting the 5.4% callable bond maturing in 2012 and the 5.9% callable bond maturing in 2017 to floating rates. No new interest rate swaps were entered into during 2008.

The majority of the Group's cash balances are held with third party fund managers with floating rates of interest being earned.

## 15 FINANCIAL RISK MANAGEMENT OBJECTIVES AND POLICIES CONTINUED

### Foreign currency risk

The US dollar is the Group's most significant currency. As a consequence, the Group results are presented in US dollars and exposures are managed against US dollars accordingly.

#### Translational

Approximately 57% of Group external sales in 2008 were denominated in currencies other than the US dollar, while a significant proportion of manufacturing and R&D costs were denominated in sterling and Swedish krona. Surplus cash generated by business units is substantially converted to, and held centrally in US dollars. As a result, operating profit and total cash flow in US dollars will be affected by movements in exchange rates.

This currency exposure is managed centrally based on forecast cash flows for the currencies of Swedish krona, sterling, euro, Australian dollar, Canadian dollar and Japanese yen. The impact of movements in exchange rates is mitigated significantly by the correlations which exist between the major currencies to which the Group is exposed and the US dollar. Monitoring of currency exposures and correlations is undertaken on a regular basis and hedging is subject to pre-execution approval.

The Group will maintain debt in non-US dollar currencies to the extent that there is an underlying net investment in the same currency and therefore a net investment hedge, can be applied. The €500m 2010 bond issued in 2008 was issued in non-US dollar currencies to match investors' appetite but currency swaps were transacted to convert it into a fixed rate US dollar instrument. As at 31 December 2008, after currency swaps, 4.2% of interest bearing loans and borrowings were denominated in sterling and 17.8% of interest bearing loans and borrowings were denominated in euros.

#### Transactional

The transaction exposures that arise from non-local currency sales and purchases by subsidiaries are, where practicable, fully hedged using forward foreign exchange contracts. In addition, the Group's external dividend, which is paid principally in sterling and Swedish krona, is fully hedged from announcement to payment date.

### Credit risk

The Group is exposed to credit risk on financial assets, such as cash balances (including fixed deposits and cash and cash equivalents), derivative instruments, trade and other receivables. The Group is also exposed in its net asset position to its own credit risk in respect of the 2023 debentures and 2014 bonds which are accounted for at fair value through profit and loss.

During the year, the Company established a credit risk oversight group, consisting of senior members of the finance function to monitor credit related risks and risk management processes, in response to the ongoing financial markets and economic uncertainty.

### Trade and other receivables

Trade receivable exposures are managed locally in the operating units where they arise and credit limits are set as deemed appropriate for the customer. The Group is exposed to customers ranging from government backed agencies and large private wholesalers to privately owned pharmacies, and the underlying local economic and sovereign risks vary throughout the world. Where appropriate, the Group endeavours to minimise risks by the use of trade finance instruments such as letters of credit and insurance. The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of specific trade and other receivables where it is deemed that a receivable may not be recoverable. When the debt is deemed irrecoverable, the allowance account is written off against the underlying receivable.

### Other financial assets

Exposure to financial counterparty credit risk is controlled by the treasury team centrally in establishing and monitoring counterparty limits which are set according to the assessed risk of each counterparty. Centrally managed funds are invested entirely with counterparties whose credit rating is 'A' or better. During the year, funds held in money market funds have been progressively transferred to US Treasury funds, in light of the ongoing financial crisis.

External fund managers, who manage \$3.0bn of the Group's cash as at 31 December 2008, are rated AAA by Standard & Poor's. There were no other significant concentrations of credit risk at the balance sheet date. All financial derivatives are transacted with commercial banks, in line with standard market practice and are not backed with cash collateral. The maximum exposure to credit risk is represented by the carrying amount of each financial asset, including derivative financial instruments recorded, in the balance sheet.

## 16 FINANCIAL INSTRUMENTS

### FAIR VALUES OF FINANCIAL ASSETS AND FINANCIAL LIABILITIES

Set out below is a comparison by category of carrying values and fair values of all the Group's financial assets and financial liabilities as at 31 December 2008, 31 December 2007 and 31 December 2006. None of the financial assets or financial liabilities have been reclassified during the year.

Other financial assets represent trade and other receivables (Note 12) excluding prepayments and accrued income. Other financial liabilities represent trade and other payables (Note 17) and provisions (Note 18) excluding deferred income.

	Designated at fair value \$m	Derivatives and other items at fair value \$m	Available for sale \$m	Held for trading \$m	Amortised cost \$m	Total carrying value \$m	Fair value \$m
<b>2008</b>							
Cash and cash equivalents	—	—	—	—	4,286	<b>4,286</b>	4,286
Overdrafts	—	—	—	—	(163)	<b>(163)</b>	(163)
Loans due within one year	—	—	—	—	(830)	<b>(830)</b>	(830)
Loans due after more than one year	(1,113)	(1,727)	—	—	(8,015)	<b>(10,855)</b>	(11,238)
Derivative financial instruments	221	63	—	—	—	<b>284</b>	284
Other investments	—	—	156	50	54	<b>260</b>	260
Other financial assets	—	—	—	—	6,580	<b>6,580</b>	6,580
Other financial liabilities	—	—	—	—	(8,381)	<b>(8,381)</b>	(8,381)
<b>2007</b>							
Cash and cash equivalents	—	—	—	—	5,867	<b>5,867</b>	5,867
Overdrafts	—	—	—	—	(140)	<b>(140)</b>	(140)
Loans due within one year	—	—	—	—	(4,140)	<b>(4,140)</b>	(4,140)
Loans due after more than one year	(1,090)	(1,544)	—	—	(8,242)	<b>(10,876)</b>	(11,235)
Derivative financial instruments	67	19	—	—	—	<b>86</b>	86
Other investments	—	—	182	31	60	<b>273</b>	273
Other financial assets	—	—	—	—	5,973	<b>5,973</b>	5,973
Other financial liabilities	—	—	—	—	(8,070)	<b>(8,070)</b>	(8,070)
<b>2006</b>							
Cash and cash equivalents	—	—	—	—	7,103	<b>7,103</b>	7,103
Overdrafts	—	—	—	—	(114)	<b>(114)</b>	(114)
Loans due within one year	—	—	—	—	(22)	<b>(22)</b>	(22)
Loans due after more than one year	(1,087)	—	—	—	—	<b>(1,087)</b>	(1,087)
Derivative financial instruments	27	45	—	—	—	<b>72</b>	72
Other investments	37	—	82	26	559	<b>704</b>	704
Other financial assets	—	—	—	—	4,794	<b>4,794</b>	4,794
Other financial liabilities	—	—	—	—	(6,729)	<b>(6,729)</b>	(6,729)

Credit risk increased the fair value of the bonds designated as fair value through profit or loss by \$113m for the year and by \$134m since designation. Changes in credit risk had no material effect on any other financial assets and liabilities recognised at fair value in the Financial Statements. The change in fair value attributable to changes in credit risk is calculated as the change in fair value not attributable to market risk.

The methods and assumptions used to estimate the fair values of financial instruments together with their carrying values are as follows:

- > Cash and overdrafts – held on the balance sheet at amortised costs. Fair value approximates to carrying value.
- > Loans due within one year and after more than one year – the fair value of fixed rate publicly traded debt is based on year end quoted market prices; the fair value of floating rate debt is nominal value, as mark to market differences would be minimal given the frequency of resets. The carrying value of loans designated at fair value through profit or loss is the fair value. For loans designated as other items at fair value, carrying value is initially measured at fair value and remeasured for fair value changes in respect of the hedged risk at each balance sheet date. All other loans are held at amortised cost.
- > Derivative financial instruments – consists of interest rate swaps (included in designated as fair value through profit or loss upon initial recognition or as a fair value hedge), forward foreign exchange contracts and foreign currency option contracts (included in derivatives and other items at fair value).
  - Interest rate swaps – the fair value is estimated using appropriate zero coupon curve valuation techniques based on rates current at year end.
  - Forward foreign exchange contracts – the majority of contracts for existing transactions had maturity of six months or less from year end. The fair value of forward foreign exchange contracts is based on market forward foreign exchange rates at the year end.
  - Foreign currency option contracts – the fair value of option contracts is estimated using Black-Scholes valuation techniques.

## 16 FINANCIAL INSTRUMENTS CONTINUED

- > Other investments – includes equity securities held on the balance sheet as other investments (Note 10). The fair value of listed investments is based on year end quoted market prices. For unlisted investments, carrying values approximate fair value.
- > Other financial assets and other financial liabilities – held on the balance sheet at amortised costs with carrying value being a reasonable approximation of fair value.

The interest rates used to discount future cash flows, where applicable, are based on market swap curves at the reporting date, and were as follows:

	2008	2007	2006
Derivatives	3.8% to 4.6%	4.3% to 5.1%	4.9% to 5.3%
Loans and borrowings	3.8% to 4.6%	4.3% to 5.1%	4.9% to 5.3%

## NET GAINS AND LOSSES ON FINANCIAL ASSETS AND FINANCIAL LIABILITIES

	2008 \$m	2007 \$m	2006 \$m
<b>Included in operating profit</b>			
(Losses)/gains on forward foreign exchange contracts	(399)	(59)	168
Gains/(losses) on receivables and payables	391	74	(183)
Losses on investments designated at fair value through profit or loss	–	(1)	(13)
(Losses)/gains on available for sale current investments	(25)	(21)	5
	(33)	(7)	(23)
<b>Included in finance income and expense</b>			
Interest and fair value adjustments in respect of debt designated at fair value through profit or loss, net of derivatives	87	(22)	(59)
Interest and changes in carrying values of debt designated as hedged items, net of derivatives	(64)	(28)	–
Interest and fair value changes on fixed and short-term deposits and equity securities	140	344	368
Interest on debt, overdrafts and commercial paper held at amortised cost	(609)	(436)	(11)
Exchange losses on financial assets and liabilities	(12)	(3)	(14)
	(458)	(145)	284

\$180m fair value gains on hedging instruments and \$183m fair value losses on the hedged items have been included within interest and changes in carrying values of debt designated as hedged items, net of derivatives. \$153m fair value gains on hedging instruments and \$23m fair value losses on the hedged items have been included within interest and fair value adjustments in respect of debt designated at fair value through profit or loss, net of derivatives.

\$294m of gains on financial assets and liabilities have been taken directly to equity (2007: losses \$70m; 2006: losses \$20m).

Ineffectiveness on the net investment hedge taken to the income statement was \$nil (2007: \$nil; 2006: \$nil).

## LIQUIDITY RISK

The maturity profile of the anticipated future cash flows including interest in relation to the Group's non-derivative financial liabilities, on an undiscounted basis and which, therefore, differs from both the carrying value and fair value, is as follows:

31 December 2008	Bank overdrafts and other loans \$m	Bonds \$m	Trade, other payables and provisions \$m	Total \$m
Within one year	345	1,271	7,778	9,394
In one to two years	–	2,335	601	2,936
In two to three years	–	465	–	465
In three to four years	–	2,241	–	2,241
In four to five years	–	424	–	424
In more than five years	–	12,478	–	12,478
	345	19,214	8,379	27,938
Effect of interest	(2)	(7,956)	–	(7,958)
Effect of discounting, fair values and issue costs	–	247	–	247
<b>31 December 2008</b>	<b>343</b>	<b>11,505</b>	<b>8,379</b>	<b>20,227</b>

## 16 FINANCIAL INSTRUMENTS CONTINUED

	Bank overdrafts and other loans \$m	Bonds \$m	Trade, other payables and provisions \$m	Total \$m
<b>31 December 2007</b>				
Within one year	4,305	619	7,355	12,279
In one to two years	–	1,259	715	1,974
In two to three years	–	1,679	–	1,679
In three to four years	–	532	–	532
In four to five years	–	2,255	–	2,255
In more than five years	–	13,356	–	13,356
	4,305	19,700	8,070	32,075
Effect of interest	(25)	(8,857)	–	(8,882)
Effect of discounting, fair values and issue costs	–	33	–	33
<b>31 December 2007</b>	<b>4,280</b>	<b>10,876</b>	<b>8,070</b>	<b>23,226</b>

### MARKET RISK

#### Interest rate risk

The interest rate profile of the Group's interest bearing financial instruments, as at 31 December 2008, 31 December 2007 and 31 December 2006 are set out below. In the case of non-current financial liabilities, the classification includes the impact of interest rate swaps which convert the debt to floating rate.

	2008			2007			2006		
	Total \$m	Fixed rate \$m	Floating rate \$m	Total \$m	Fixed rate \$m	Floating rate \$m	Total \$m	Fixed rate \$m	Floating rate \$m
<b>Financial liabilities</b>									
Interest bearing loans and borrowings									
Current	993	–	993	4,280	–	4,280	136	–	136
Non-current	10,855	8,015	2,840	10,876	7,594	3,282	1,087	–	1,087
	<b>11,848</b>	<b>8,015</b>	<b>3,833</b>	<b>15,156</b>	<b>7,594</b>	<b>7,562</b>	<b>1,223</b>	<b>–</b>	<b>1,223</b>
<b>Financial assets</b>									
Fixed deposits	54	–	54	60	–	60	559	–	559
Cash and cash equivalents	4,286	–	4,286	5,867	–	5,867	7,103	–	7,103
	<b>4,340</b>	<b>–</b>	<b>4,340</b>	<b>5,927</b>	<b>–</b>	<b>5,927</b>	<b>7,662</b>	<b>–</b>	<b>7,662</b>

In addition to the financial assets above, there are \$7,070m (2007: \$6,272m; 2006: \$5,011m) of other current and non-current asset investments and other financial assets on which no interest is received.

#### Foreign currency risk

##### Translational

During the year there has been a significant movement in exchange rates for the Group's principal six currency exposures: sterling (GBP), Swedish krona (SEK), euro (EUR), Australian dollar (AUD), Japanese yen (JPY) and Canadian dollar (CAD). The weakness of our cost currencies sterling and Swedish krona relative to euro which is our main non-US dollars income currency has resulted in a net benefit for the Group. No hedges were outstanding as at 31 December 2008.

##### Transactional

100% of the Group's major transactional currency exposures on working capital balances, which typically extend for up to three months, are hedged, where practicable, using forward foreign exchange contracts against individual Group companies' reporting currency.

## 16 FINANCIAL INSTRUMENTS CONTINUED

The table below sets out the principal foreign exchange contracts outstanding at 31 December 2008, 31 December 2007 and 31 December 2006 along with the underlying gross exposure as defined above.

	GBP \$m	SEK \$m	EUR \$m	AUD \$m	JPY \$m	CAD \$m
<b>2008</b>						
<b>Gross exposure</b>	<b>(676)</b>	<b>(444)</b>	<b>505</b>	<b>57</b>	<b>166</b>	<b>49</b>
Forward exchange contracts	690	445	(512)	(52)	(166)	(24)
<b>Net exposure</b>	<b>14</b>	<b>1</b>	<b>(7)</b>	<b>5</b>	—	<b>25</b>
<b>2007</b>						
<b>Gross exposure</b>	<b>(536)</b>	<b>(476)</b>	<b>627</b>	<b>24</b>	<b>168</b>	<b>57</b>
Forward exchange contracts	530	494	(627)	(24)	(168)	(57)
<b>Net exposure</b>	<b>(6)</b>	<b>18</b>	—	—	—	—
<b>2006</b>						
<b>Gross exposure</b>	<b>(429)</b>	<b>(697)</b>	<b>625</b>	<b>37</b>	<b>169</b>	<b>61</b>
Forward exchange contracts	653	1,104	(938)	(57)	(279)	(43)
<b>Net exposure</b>	<b>224</b>	<b>407</b>	<b>(313)</b>	<b>(20)</b>	<b>(110)</b>	<b>18</b>

### Sensitivity analysis

The sensitivity analysis set out below summarises the sensitivity of the market value of our financial instruments to hypothetical changes in market rates and prices. The range of variables chosen for the sensitivity analysis reflects our view of changes which are reasonably possible over a one year period. Market values are the present value of future cash flows based on market rates and prices at the valuation date. For long-term debt, an increase in interest rates results in a decline in the fair value of debt.

The sensitivity analysis assumes an instantaneous 100 basis point change in interest rates in all currencies from their levels at 31 December 2008, with all other variables held constant. Based on the composition of our long-term debt portfolio as at 31 December 2008, a 1% increase in interest rates would result in an additional \$38m in interest expense being incurred per year. The exchange rate sensitivity analysis assumes an instantaneous 10% change in foreign currency exchange rates from their levels at 31 December 2008, with all other variables held constant. The +10% case assumes a 10% strengthening of the US dollar against all other currencies and the -10% case assumes a 10% weakening of the US dollar.

Each incremental 10% movement in foreign currency exchange rates would have approximately the same effect as the initial 10% detailed in the table below.

### 31 DECEMBER 2008

	Interest rates +1%	Interest rates -1%	Exchange rates +10%	Exchange rates -10%
Increase/(decrease) in fair value of financial instruments	587	(706)	217	(217)
Impact on income statement: gain/(loss)	—	—	(57)	57
Impact on equity: gain/(loss)	—	—	274	(274)

### 31 DECEMBER 2007

	Interest rates +1%	Interest rates -1%	Exchange rates +10%	Exchange rates -10%
Increase/(decrease) in fair value of financial instruments	666	(779)	165	(165)
Impact on income statement: gain/(loss)	—	—	(37)	37
Impact on equity: gain/(loss)	—	—	202	(202)

### 31 DECEMBER 2006

	Interest rates +1%	Interest rates -1%	Exchange rates +10%	Exchange rates -10%
Increase/(decrease) in fair value of financial instruments	—	—	(185)	185
Impact on income statement: gain/(loss)	—	—	(104)	104
Impact on equity: gain/(loss)	—	—	(81)	81

There has been no change in the methods and assumptions used in preparing the above sensitivity analysis over the three year period.

## 16 FINANCIAL INSTRUMENTS CONTINUED

### CREDIT RISK

The carrying amount of financial assets, being cash and cash equivalents, derivative assets, other investments and other financial assets (consisting of trade and other receivables) represent the maximum credit exposure.

The maximum exposure to credit risk for trade receivables at the reporting date by geographic region was:

	2008 \$m	2007 \$m	2006 \$m
US	<b>2,032</b>	1,961	1,491
United Kingdom	<b>459</b>	425	397
Sweden	<b>226</b>	260	242
Euro-zone countries	<b>833</b>	901	771
Other European countries	<b>257</b>	247	171
Japan	<b>955</b>	771	647
Other countries	<b>796</b>	761	569
	<b>5,558</b>	5,326	4,288

In the US, sales to three wholesalers accounted for approximately 81% of US sales (2007: three wholesalers accounted for approximately 82%; 2006: three wholesalers accounted for approximately 80%).

The ageing of trade receivables at the reporting date was:

	2008 \$m	2007 \$m	2006 \$m
Not past due	<b>5,262</b>	4,930	3,966
Overdue but renegotiated	<b>3</b>	120	86
Past due 0-90 days	<b>106</b>	79	83
Past due 90-180 days	<b>60</b>	99	62
Past due > 180 days	<b>127</b>	98	91
	<b>5,558</b>	5,326	4,288

	2008 \$m	2007 \$m	2006 \$m
<b>Movements in provisions for trade receivable impairments</b>			
Balance at beginning of year	<b>89</b>	52	45
Income statement charge	<b>23</b>	34	4
Amounts utilised, exchange and other movements	<b>(13)</b>	3	3
Balance at end of year	<b>99</b>	89	52

The allowance for impairment has been calculated based on past experience and is in relation to specific customers. Given the profile of our customers, including large wholesalers and government backed agencies, no further credit risk has been identified with the trade receivables not past due other than those balances for which an allowance has been made.

## 17 TRADE AND OTHER PAYABLES

	2008 \$m	2007 \$m	2006 \$m
<b>Current liabilities</b>			
Trade payables	3,903	3,497	3,482
Value added and payroll taxes and social security	371	434	280
Other payables	1,026	865	1,166
Accruals	1,878	2,172	1,367
	7,178	6,968	6,295
<b>Non-current liabilities</b>			
Other payables	149	229	254

Included in other payables are amounts totalling \$227m (2007: \$209m; 2006: \$241m) to meet insurance obligations of the Group's insurance subsidiaries.

## 18 PROVISIONS FOR LIABILITIES AND CHARGES

	Severance \$m	Environmental \$m	Employee benefits \$m	Other provisions \$m	Total \$m
<b>At 1 January 2006</b>	62	68	122	102	354
Charge/(credit) for year	(1)	56	36	(4)	87
On acquisition of subsidiary	–	–	–	20	20
Cash paid	(36)	(29)	(36)	(5)	(106)
Exchange and other movements	6	–	(13)	18	11
<b>At 31 December 2006</b>	<b>31</b>	<b>95</b>	<b>109</b>	<b>131</b>	<b>366</b>
Charge for year	620	48	4	58	730
Cash paid	(25)	(32)	(23)	(25)	(105)
Exchange and other movements	17	–	10	2	29
<b>At 31 December 2007</b>	<b>643</b>	<b>111</b>	<b>100</b>	<b>166</b>	<b>1,020</b>
Charge/(credit) for year	469	37	(23)	164	647
Cash paid	(405)	(39)	(1)	(12)	(457)
Exchange and other movements	(88)	21	8	(9)	(68)
<b>At 31 December 2008</b>	<b>619</b>	<b>130</b>	<b>84</b>	<b>309</b>	<b>1,142</b>

	2008 \$m	2007 \$m	2006 \$m
Due within one year	600	387	39
Due after more than one year	542	633	327
	1,142	1,020	366

AstraZeneca is undergoing a worldwide restructuring initiative which involves rationalisation of the Global Supply Chain, European Sales and Marketing, Information Services and Business Support infrastructure and Research and Development. Employee costs in connection with the initiatives are recognised in severance provisions. This is a three-year programme expected to be substantially completed by the end of 2010.

Details of the environmental provisions are provided in Note 25.

Employee benefit provisions include the executive deferred bonus plan and other employee benefit provisions. Further details are included in Note 24.

Other provisions comprise various amounts relating to specific legal and constructive obligations and disputes.

No provision has been released or applied for any purpose other than that for which it was established.

## 19 CAPITAL AND RESERVES

	Share capital \$m	Share premium account \$m	Capital redemption reserve \$m	Merger reserve \$m	Other reserves \$m	Retained earnings \$m	Total \$m	Minority equity interests \$m	Total equity \$m
<b>At 1 January 2006</b>	395	692	53	433	1,345	10,679	13,597	94	13,691
Total recognised income and expense	–	–	–	–	–	6,970	6,970	24	6,994
Transfer to other reserves <sup>1</sup>	–	–	–	–	53	(53)	–	–	–
Dividends	–	–	–	–	–	(2,217)	(2,217)	–	(2,217)
Issue of Ordinary Shares	6	979	–	–	–	–	985	–	985
Re-purchase of Ordinary Shares	(18)	–	18	–	–	(4,147)	(4,147)	–	(4,147)
Share-based payments	–	–	–	–	–	129	129	–	129
Treasury shares	–	–	–	–	–	(13)	(13)	–	(13)
Transfer from minority interests to payables	–	–	–	–	–	–	–	(6)	(6)
<b>Net movement</b>	(12)	979	18	–	53	669	1,707	18	1,725
<b>At 31 December 2006</b>	383	1,671	71	433	1,398	11,348	15,304	112	15,416
Total recognised income and expense	–	–	–	–	–	5,934	5,934	35	5,969
Transfer to other reserves <sup>1</sup>	–	–	–	–	(20)	20	–	–	–
Dividends	–	–	–	–	–	(2,658)	(2,658)	–	(2,658)
Issue of Ordinary Shares	1	217	–	–	–	–	218	–	218
Re-purchase of Ordinary Shares	(20)	–	20	–	–	(4,170)	(4,170)	–	(4,170)
Share-based payments	–	–	–	–	–	150	150	–	150
Transfer from minority interests to payables	–	–	–	–	–	–	–	(10)	(10)
<b>Net movement</b>	(19)	217	20	–	(20)	(724)	(526)	25	(501)
<b>At 31 December 2007</b>	364	1,888	91	433	1,378	10,624	14,778	137	14,915
Total recognised income and expense	–	–	–	–	–	4,176	4,176	48	4,224
Transfer to other reserves <sup>1</sup>	–	–	–	–	27	(27)	–	–	–
Dividends	–	–	–	–	–	(2,767)	(2,767)	–	(2,767)
Issue of Ordinary Shares	1	158	–	–	–	–	159	–	159
Re-purchase of Ordinary Shares	(3)	–	3	–	–	(610)	(610)	–	(610)
Share-based payments	–	–	–	–	–	176	176	–	176
Transfer from minority interests to payables	–	–	–	–	–	–	–	(11)	(11)
Dividend paid by subsidiary to minority interest	–	–	–	–	–	–	–	(26)	(26)
<b>Net movement</b>	(2)	158	3	–	27	948	1,134	11	1,145
<b>At 31 December 2008</b>	362	2,046	94	433	1,405	11,572	15,912	148	16,060

<sup>1</sup> Amounts charged to other reserves relate to exchange adjustments arising on goodwill.

Cumulative translation differences included within retained earnings	2008 \$m	2007 \$m	2006 \$m
Balance at beginning of year	2,414	1,945	1,080
Foreign exchange arising on consolidation	(1,355)	489	918
Exchange adjustments on goodwill (recorded against other reserves)	(27)	20	(53)
Foreign exchange on borrowings	291	(40)	–
Net exchange movement in retained earnings	(1,091)	469	865
Balance at end of year	1,323	2,414	1,945

## OTHER RESERVES

The other reserves arose from the cancellation of £1,255m of share premium account by the parent company in 1993 and the redenomination of share capital (\$157m) in 1999. The reserves are available for writing off goodwill arising on consolidation and, subject to guarantees given to preserve creditors as at the date of the court order, are available for distribution.

## RETAINED EARNINGS

The cumulative amount of goodwill written off directly to reserves resulting from acquisitions, net of disposals, amounted to \$654m (2007: \$681m; 2006: \$661m) using year end rates of exchange. At 31 December 2008, nil shares, at a cost of \$nil, have been deducted from retained earnings (2007: nil shares, at a cost of \$nil; 2006: 1,112,223 shares, at a cost of \$40m).

There are no significant statutory or contractual restrictions on the distribution of current profits of subsidiaries, joint ventures or associates; undistributed profits of prior years are, in the main, permanently employed in the businesses of these companies. The undistributed income of AstraZeneca companies overseas may be liable to overseas taxes and/or UK taxation (after allowing for double taxation relief) if they were to be distributed as dividends (see Note 3).

## 20 SHARE CAPITAL OF PARENT COMPANY

	Authorised	Allotted, called-up and fully paid		
	2008 \$m	2008 \$m	2007 \$m	2006 \$m
Issued Ordinary Shares (\$0.25 each)	362	362	364	383
Unissued Ordinary Shares (\$0.25 each)	238	—	—	—
Redeemable Preference Shares (£1 each – £50,000)	—	—	—	—
	600	362	364	383

The total authorised number of Ordinary Shares at 31 December 2008 was 2,400,000,000, of which 1,447,481,548 Ordinary Shares were in issue.

The Redeemable Preference Shares carry limited class voting rights and no dividend rights. This class of shares is capable of redemption at par at the option of the Company on the giving of seven days' written notice to the registered holder of the shares.

The movements in the number of shares during the year can be summarised as follows:

	No. of shares (million)	
	2008	2007
At 1 January	1,457	1,532
Issues of shares	4	5
Re-purchase of shares	(14)	(80)
<b>At 31 December</b>	<b>1,447</b>	<b>1,457</b>

### SHARE RE-PURCHASES

During the year the Company re-purchased, and subsequently cancelled, 13,597,940 Ordinary Shares at an average price of 2397 pence per share. The total consideration, including expenses, was \$610m. The consideration has been charged against retained earnings.

### SHARE SCHEMES

A total of 4,078,635 Ordinary Shares were issued during the year in respect of share schemes. Details of movements in the number of Ordinary Shares under option are shown in Note 24; details of options granted to Directors are shown in the Directors' Remuneration Report.

### SHARES HELD BY SUBSIDIARIES

No shares in the Company were held by subsidiaries in any year.

## 21 DIVIDENDS TO SHAREHOLDERS

	2008 Per share	2007 Per share	2006 Per share	2008 \$m	2007 \$m	2006 \$m
Final	\$1.350	\$1.230	\$0.920	1,967	1,885	1,453
Interim	\$0.550	\$0.520	\$0.490	800	773	764
	\$1.900	\$1.750	\$1.410	2,767	2,658	2,217

The second interim dividend, to be confirmed as final, is \$1.50 per share and \$2,171m in total. This will be payable on 16 March 2009.

On payment of the dividends, exchange gains of \$28m (2007: gains of \$17m; 2006: losses of \$3m) arose. These exchange gains and losses are included in Note 2.

## 22 ACQUISITIONS OF BUSINESS OPERATIONS

There were no new acquisitions made during the year ended 31 December 2008.

Details with regard to acquisitions made during the year ended 31 December 2007 are set out below:

### MEDIMMUNE, INC.

On 1 June 2007, AstraZeneca announced the successful tender offer for all the outstanding shares of common stock of MedImmune, Inc., a world-leading biotechnology company with proven biologics discovery and development strength, pipeline and leading biomanufacturing capability. At that date, approximately 96.0% of the outstanding shares were successfully tendered; the remaining shares were acquired by 18 June 2007. The financial results of MedImmune, Inc. have been consolidated into the Group's results from 1 June 2007.

Cash consideration of \$13.9bn was paid for the outstanding shares. After taking account of the cash and investments acquired, together with the settlement of MedImmune's convertible debt and outstanding share options, the total cash paid to acquire MedImmune was \$15.6bn.

In most business acquisitions, there is a part of the cost that is not capable of being attributed in accounting terms to identifiable assets and liabilities acquired and is therefore recognised as goodwill. In the case of the acquisition of MedImmune, this goodwill is underpinned by a number of elements, which individually cannot be quantified. Most significant amongst these is the premium attributable to a pre-existing, well positioned business in the innovation intensive, high growth biologics market with a highly skilled workforce and established reputation. Other important elements include buyer specific synergies, potential additional indications for identified products and the core technological capabilities and knowledge base of the company.

MedImmune, Inc. contributed \$714m of turnover in the year of acquisition. After amortisation, net investments/interest costs (including interest costs of external financing of \$446m) and tax, the loss attributable to MedImmune in the year of acquisition was \$410m. If the acquisition had taken effect at the beginning of the reporting period (1 January 2007), on a proforma basis the revenue, profit before tax and profit after tax of the combined Group for 2007 would have been \$30,127m, \$7,576m and \$5,351m, respectively. Basic and diluted Earnings per Share for the combined Group in 2007 would have been \$3.56 and \$3.55, respectively. This proforma information has been prepared taking into account amortisation, interest costs and related tax effects but does not purport to represent the results of the combined Group that actually would have occurred had the acquisition taken place on 1 January 2007 and should not be taken to be representative of future results.

	Book value \$m	Fair value adjustment \$m	Fair value \$m
Non-current assets			
Intangible assets	193	7,882	8,075
Property, plant and equipment	523	70	593
Other	550	(17)	533
	1,266	7,935	9,201
Current assets	1,439	115	1,554
Current liabilities	(326)	39	(287)
Additional obligations related to convertible debt and share options	–	(1,724)	(1,724)
Non-current liabilities			
Interest bearing loans and borrowings	(1,165)	–	(1,165)
Other payables	(73)	–	(73)
Deferred tax assets/(liabilities)	314	(2,694)	(2,380)
	(924)	(2,694)	(3,618)
Total assets acquired	1,455	3,671	5,126
Goodwill			8,757
Total consideration for outstanding shares			13,883
Additional payments related to convertible debt, share options and other acquisition obligations			1,770
<b>Total consideration</b>			<b>15,653</b>

The total consideration for outstanding shares includes \$29m of directly attributable costs.

The intangible assets acquired included: (a) product, marketing and distribution rights relating to currently marketed products or franchises (principally in respect of the *Synagis* and motavizumab RSV franchise, *FluMist* and *Ethyol*); (b) product marketing and distribution rights relating to products in development (principally motavizumab); and distribution rights relating to out-licensed product (principally the HPV cervical cancer vaccine). The combined acquisitions fair value of \$8,075m comprised \$6,570m relating to the Infection Therapy Area, \$1,425m relating to the Oncology Therapy Area and \$80m relating to the R&D Therapy Area. The carrying value of these assets is summarised in Note 9.

## 22 ACQUISITIONS OF BUSINESS OPERATIONS CONTINUED

### OTHER ACQUISITIONS

	Book value \$m	Fair value adjustment \$m	Fair value \$m
Non-current assets			
Intangible assets	–	347	347
Property, plant and equipment	7	–	7
	7	347	354
Current assets	12	–	12
Current liabilities	(19)	–	(19)
Non-current liabilities			
Other payables	(9)	–	(9)
Deferred tax liabilities	–	(118)	(118)
	(9)	(118)	(127)
Total assets acquired	(9)	229	220
Goodwill	–	–	–
<b>Total consideration</b>			<b>220</b>

The total consideration includes \$3m of directly attributable costs.

#### Arrow Therapeutics Limited

On 28 February 2007, the Company acquired 100% of the issued share capital of Arrow Therapeutics Limited for cash consideration of \$147m. Arrow Therapeutics Limited is a UK biotechnology company, focused on the discovery and development of anti-viral therapies. The acquisition provides a widely recognised expert group and technology platform in an area of research that complements internal capabilities in the therapy area of infection and anti-bacterials.

Arrow Therapeutics Limited had revenue of \$nil and a loss of \$26m for 2007 of which \$nil of revenue and \$17m of loss related to the period between acquisition and 31 December 2007.

#### Atlantis Components Inc.

On 10 October 2007, a Company subsidiary, Astra Tech, acquired 100% of the issued share capital of Atlantis Components Inc. for cash consideration of \$71m.

Atlantis Components Inc. is a US dental business whose principal activity is the design and manufacture of bespoke dental implant abutments. The intangible asset acquired is the specialist CAD/CAM technology used to design and manufacture customised dental implant abutments. The acquisition further strengthens Astra Tech's product portfolio in the field of dental implants.

The revenue and loss in 2007, for both the period since acquisition and full year, are immaterial.

### CASH FLOWS

	MedImmune, Inc. \$m	Other \$m	Total \$m
Total consideration	15,653	220	15,873
Cash and cash equivalents included in undertaking acquired	(979)	(3)	(982)
<b>Net cash consideration</b>	<b>14,674</b>	<b>217</b>	<b>14,891</b>

Details with regard to acquisitions made during the year ended 31 December 2006 are set out below:

#### Cambridge Antibody Technology Group plc

On 22 August 2006, AstraZeneca completed the acquisition of 100% of the issued share capital of Cambridge Antibody Technology Group plc, a biopharmaceutical company with a leading position in the discovery and development of human therapeutic antibodies. On 22 June 2006, the offer to acquire the entire share capital of Cambridge Antibody Technology Group plc was declared unconditional and the financial results of Cambridge Antibody Technology Group plc were consolidated into the Company's results from this date. Cash consideration of \$1,074m was paid during 2006. Prior to the acquisition, AstraZeneca had been engaged in a collaboration and licensing agreement with Cambridge Antibody Technology Group plc. At 31 December 2005, AstraZeneca held a 19.2% interest in the issued share capital of Cambridge Antibody Technology Group plc, which was recorded on the balance sheet within non-current asset investments as 'Equity securities available for sale'.

The goodwill arising on the acquisition results from assets which cannot be recognised separately and measured reliably including early stage pipeline products and a highly skilled workforce.

## 22 ACQUISITIONS OF BUSINESS OPERATIONS CONTINUED

Cambridge Antibody Technology Group plc had revenue of \$nil and a loss of \$58m for 2006, of which \$nil of revenue and \$38m of loss related to the period between acquisition and 31 December 2006. Subsequent to the acquisition of Cambridge Antibody Technology Group plc, the Humira™ royalty stream acquired with the company was sold for \$661m.

	Book value \$m	Fair value adjustment \$m	Fair value \$m
Non-current assets			
Intangible assets – Humira™ royalty stream	–	675	675
Intangible assets – other	21	560	581
Property, plant and equipment	24	–	24
Other	20	–	20
	65	1,235	1,300
Current assets	336	–	336
Current liabilities	(72)	–	(72)
Non-current liabilities			
Deferred taxation	(5)	(364)	(369)
Other	–	(20)	(20)
	(5)	(384)	(389)
Total assets acquired	324	851	1,175
Goodwill	–	104	104
Less:			
Existing non-current asset investment	–	(163)	(163)
Total consideration	324	792	1,116
Exchange	–	(24)	(24)
Settled in loan notes	–	(18)	(18)
<b>Cash paid</b>	<b>324</b>	<b>750</b>	<b>1,074</b>

The total consideration includes \$15m of directly attributable costs.

### KuDOS Pharmaceuticals Limited

On 31 January 2006, the Company acquired 100% of the issued share capital of KuDOS Pharmaceuticals Limited for a cash consideration of \$206m. KuDOS Pharmaceuticals Limited is a UK biotechnology company focused on the discovery and development of oncology therapies based on inhibition of DNA repair. The acquisition provides the Company with a widely recognised expert group and technology platform that complements the existing capabilities of the oncology franchise, one of the Company's key therapy areas. The goodwill arising on the acquisition results from assets which cannot be recognised separately and measured reliably and includes early stage pipeline products.

KuDOS Pharmaceuticals Limited had revenue of \$nil and a loss of \$15m for 2006 of which \$nil of revenue and \$14m of loss related to the period between acquisition and 31 December 2006.

	Book value \$m	Fair value adjustment \$m	Fair value \$m
Non-current assets			
Intangible assets – other	–	285	285
Property, plant and equipment	2	–	2
	2	285	287
Current assets	3	–	3
Current liabilities	(11)	–	(11)
Non-current liabilities			
Deferred taxation	–	(85)	(85)
Total assets acquired	(6)	200	194
Goodwill	–	12	12
<b>Total consideration</b>	<b>(6)</b>	<b>212</b>	<b>206</b>

The total consideration includes \$2m of directly attributable costs.

## 22 ACQUISITIONS OF BUSINESS OPERATIONS CONTINUED

### CASH FLOWS

	Cambridge Antibody Technology Group plc \$m	KuDOS Pharmaceuticals Limited \$m	Total \$m
Total consideration	1,074	206	1,280
Cash and cash equivalents included in undertaking acquired	(129)	(3)	(132)
<b>Net cash consideration</b>	<b>945</b>	<b>203</b>	<b>1,148</b>

## 23 POST-RETIREMENT BENEFITS

### PENSIONS

#### Background

The Company and most of its subsidiaries offer retirement plans which cover the majority of employees in the Group. Many of these plans are "defined contribution", where the company contribution and resulting income statement charge is fixed at a set level or is a set percentage of employees' pay. However, several plans, mainly in the UK, the US and Sweden, are "defined benefit", where benefits are based on employees' length of service and average final salary (typically averaged over 1, 3 or 5 years). The major defined benefit plans, apart from the collectively bargained Swedish plan (which is still open to employees born before 1979), have been closed to new entrants since 2000.

The UK plan, which is the single largest plan, has specific restrictions imposed on one section of the membership preventing amendments that will prejudice the rights or interest of that section of the membership.

The major defined benefit plans are funded through legally separate fiduciary administered funds. The cash funding of the plans, which may from time to time involve special payments, is designed, in consultation with independent qualified actuaries, to ensure that the assets together with future contributions should be sufficient to meet future obligations. The funding is monitored rigorously by the Company and appropriate fiduciaries specifically with reference to the Company's credit rating, market capitalisation and cash flows.

#### Post-retirement scheme deficit

The assets and obligations of the defined benefit schemes operated by the Group at 31 December 2008 as calculated in accordance with IAS 19 are shown below. The fair values of the schemes' assets are not intended to be realised in the short term and may be subject to significant change before they are realised. The present value of the schemes' obligations is derived from cash flow projections over long periods and is thus inherently uncertain.

	Value at 31 December 2008			Value at 31 December 2007		
	UK \$m	Rest of Group \$m	Total \$m	UK \$m	Rest of Group \$m	Total \$m
<b>Scheme assets</b>						
Equities	1,461	960	<b>2,421</b>	2,581	1,453	4,034
Bonds	1,935	772	<b>2,707</b>	2,517	888	3,405
Others	439	281	<b>720</b>	1,212	303	1,515
<b>Total fair value of assets</b>	<b>3,835</b>	<b>2,013</b>	<b>5,848</b>	<b>6,310</b>	<b>2,644</b>	<b>8,954</b>
<b>Present value of scheme obligations</b>	<b>(5,029)</b>	<b>(3,591)</b>	<b>(8,620)</b>	<b>(7,644)</b>	<b>(3,348)</b>	<b>(10,992)</b>
<b>Past service cost not yet recognised</b>	–	40	<b>40</b>	–	40	40
<b>Deficit in the scheme as recognised in the balance sheet</b>	<b>(1,194)</b>	<b>(1,538)</b>	<b>(2,732)</b>	<b>(1,334)</b>	<b>(664)</b>	<b>(1,998)</b>

During the year, the Group has adopted IFRIC 14 'IAS19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction'. There are no impacts on the reported results.

#### Financing Principles

96.3% of the Group's defined benefit obligations at 31 December 2008 are in schemes within the UK, the US, Sweden or Germany. In these countries the pension obligations are funded with reference to the following financing principles:

- > The Group has a fundamental belief in funding the benefits it promises to employees.
- > The Group considers its pension arrangements in the context of its broader capital structure. In general it does not believe in committing excessive capital for funding whilst it has better uses of capital within the business nor does it wish to generate surpluses.
- > The pension funds are not part of the Group's core business. Pension funds may take rewarded risks with the investments underlying the funding, subject to adequate controls and the expected rewards outweighing the risks.

## 23 POST-RETIREMENT BENEFITS CONTINUED

- > The Group recognises that deciding to hold certain investments may cause volatility in the funding position. The Group would not wish to amend its contribution level for relatively small deviations from its preferred funding level, because it is expected that there will be short term volatility, but it is prepared to react appropriately to more significant deviations.
- > In the event that local regulations require an additional level of financing, the Group would consider the use of alternative methods of providing this that do not require immediate cash funding but help mitigate exposure of the pension arrangement to the credit risk of the Group.

These principles are appropriate to AstraZeneca's business at the present date; should circumstances change they may require review.

The Company has developed a funding framework to implement these principles. This determines the cash contributions payable to the pension funds, but does not affect the IAS 19 liabilities. To reduce the risk of committing excess capital to pension funds, liabilities are based on the expected return on the actual pension assets, rather than a corporate bond yield. At present this puts a different value on the liabilities than IAS 19.

### UK

With regard to the Group's UK defined benefit fund, the above principles are modified in light of the UK regulatory requirements and resulting discussions with the pension fund Trustee. The most recent full actuarial valuation was carried out at 31 March 2006.

Under the agreed funding principles for the UK, cash contributions will be paid to the fund to target a level of assets in excess of the current expected cost of providing benefits. The Company will make additional contributions to an escrow account which will be held outside of the pension fund. The escrow account assets will be payable to the fund in agreed circumstances, for example in the event of the Company and Trustee agreeing a change to the current long term investment strategy.

The market value of the fund's assets at the valuation date was £3,070m (\$5,363m equivalent), representing 97% of the fund's actuarially assessed liabilities as valued in accordance with the fund's technical provisions. The shortfall will be funded over nine years through payments of about £62m per annum which include the regular contributions required to meet the benefits accruing of about £53m per annum. In addition to this, contributions of around £27m per annum will be payable to the escrow account.

Under the agreed funding principles, the key assumptions as at 31 March 2006 for contributions to both the fund and escrow account are as follows: long-term UK price inflation set at 2.8% pa, salary increases at 4.1% pa, pension increases at 2.8% pa and investment returns at 6.8% pa (pre-retirement) and 5.1% pa (post-retirement).

### Rest of Group

The IAS 19 positions as at 31 December 2008 are shown below for each of the other countries with significant defined benefit plans. These plans account for 91% of the Group's defined benefit obligations outside of the UK. In principle, these plans are funded in line with the financing principles and contributions paid as prescribed by the funding framework.

- > The US defined benefits programme was actuarially revalued at 31 December 2008, when plan obligations were \$1,724m and plan assets were \$1,150m. This includes obligations in respect of the non-qualified plan which is largely unfunded.
- > The Swedish defined benefits programme was actuarially revalued at 31 December 2008, when plan obligations were estimated to amount to \$1,349m and plan assets were \$576m.
- > The German defined benefits programme was actuarially revalued at 31 December 2008, when plan obligations amounted to \$198m and plan assets were \$27m.

On current bases, it is expected that contributions (excluding those in respect of past service cost) during the year ended 31 December 2009 to the four main countries will be \$230m. However, the Company and the Trustees are currently in discussions to increase contributions.

### POST-RETIREMENT BENEFITS OTHER THAN PENSIONS

In the US, and to a lesser extent in certain other countries, AstraZeneca's employment practices include the provision of healthcare and life assurance benefits for retired employees. As at 31 December 2008, some 4,377 retired employees and covered dependants currently benefit from those provisions and some 13,771 current employees will be eligible on their retirement. AstraZeneca accrues for the present value of such retiree obligations over the working life of the employee. In practice these benefits will be funded with reference to the Financing Principles.

The cost of post-retirement benefits other than pensions for the Group in 2008 was \$21m (2007: \$26m; 2006: \$12m). Plan assets were \$197m and plan obligations were \$428m at 31 December 2008. These benefit plans have been included in the disclosure of post-retirement benefits under IAS 19.

## 23 POST-RETIREMENT BENEFITS CONTINUED

### FINANCIAL ASSUMPTIONS

Qualified independent actuaries have updated the actuarial valuations of the major defined benefit schemes operated by the Group to 31 December 2008. The assumptions used by the actuaries are chosen from a range of possible actuarial assumptions which, due to the long-term nature of the scheme, may not necessarily be borne out in practice. These assumptions were as follows:

	2008		2007	
	UK	Rest of Group	UK	Rest of Group
Inflation assumption	2.8%	2.2%	3.3%	2.3%
Rate of increase in salaries	3.8%	3.4%	4.5%	3.7%
Rate of increase in pensions in payment	2.8%	0.8%	3.3%	0.9%
Discount rate	6.2%	4.6%	5.8%	5.4%
Long term rate of return expected at 31 December				
Equities	7.9%	7.7%	8.0%	8.9%
Bonds	5.2%	4.9%	5.6%	5.0%
Others	6.0%	3.5%	6.5%	4.8%
Rate of increase in medical costs	10.0%	10.0%	10.0%	9.0%

The expected return on assets is determined with reference to the expected long term level of dividends, interest and other returns derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less any costs of administering the plan, less any tax payable by the plan. The expected returns are based on long term market expectations and analysed on a regular basis to ensure any sustained movements in underlying markets are reflected.

### DEMOGRAPHIC ASSUMPTIONS

The mortality assumptions are based on country specific mortality tables. These are compared to actual AstraZeneca experience and adjusted where sufficient data is available. Additional allowance for future improvements in life expectancy is included for all major schemes where there is credible data to support this continuing trend.

The table below illustrates life expectancy assumptions at age 65 for male members retiring in 2008 and members expected to retire in 2028.

Country	Life expectancy assumption for a male member retiring at age 65			
	2008	2028	2007	2027
UK	23.8	25.8	23.7	25.7
US	19.6	21.1	19.6	21.1
Sweden	20.4	22.4	20.4	22.4
Germany	17.7	20.5	17.7	20.5

### SENSITIVITY OF MEDICAL COST ASSUMPTIONS

	Effect of change in medical cost assumption increase/(decrease)			
	+1%	-1%	+1%	-1%
Current service and interest cost of net periodic post-employment medical costs (\$m)	4	(3)	4	(4)
Accumulated post-employment benefit obligation for medical costs (\$m)	28	(28)	30	(19)

## 23 POST-RETIREMENT BENEFITS CONTINUED

## ACTUARIAL GAINS AND LOSSES

	2008	2007	2006	2005
<b>UK</b>				
Present value of obligations (\$m)	(5,029)	(7,644)	(7,352)	(6,309)
Fair value of plan assets (\$m)	3,835	6,310	6,078	5,314
Deficit in the scheme (\$m)	(1,194)	(1,334)	(1,274)	(995)
Experience adjustments on:				
Scheme assets				
Amount (\$m)	(1,185)	(185)	(259)	636
Percentage of scheme assets	30.9%	2.9%	4.3%	12.0%
Scheme obligations				
Amount (\$m)	972	114	71	(539)
Percentage of scheme obligations	19.3%	1.5%	1.0%	8.5%
<b>Rest of Group</b>				
Present value of obligations (\$m)	(3,591)	(3,348)	(3,109)	(2,995)
Fair value of plan assets (\$m)	2,013	2,644	2,493	2,284
Deficit in the scheme (\$m)	(1,578)	(704)	(616)	(711)
Experience adjustments on:				
Scheme assets				
Amount (\$m)	(700)	(24)	55	63
Percentage of scheme assets	34.8%	0.9%	2.2%	2.8%
Scheme obligations				
Amount (\$m)	(319)	(18)	25	(195)
Percentage of scheme obligations	8.9%	0.5%	0.8%	6.5%
<b>Total</b>				
Present value of obligations (\$m)	(8,620)	(10,992)	(10,461)	(9,304)
Fair value of plan assets (\$m)	5,848	8,954	8,571	7,598
Deficit in the scheme (\$m)	(2,772)	(2,038)	(1,890)	(1,706)
Experience adjustments on:				
Scheme assets				
Amount (\$m)	(1,885)	(209)	(204)	699
Percentage of scheme assets	32.2%	2.3%	2.4%	9.2%
Scheme obligations				
Amount (\$m)	653	96	96	(734)
Percentage of scheme obligations	7.6%	0.9%	0.9%	7.9%

The obligation arises from the following plans:

	2008		2007	
	UK \$m	Rest of Group \$m	UK \$m	Rest of Group \$m
Funded	(5,004)	(3,025)	(7,616)	(2,911)
Unfunded	(25)	(566)	(28)	(437)
Total	(5,029)	(3,591)	(7,644)	(3,348)

## 23 POST-RETIREMENT BENEFITS CONTINUED

## INCOME STATEMENT DISCLOSURES

The amounts that have been charged to the consolidated income statement and consolidated statement of recognised income and expense, in respect of defined benefit schemes for the year ended 31 December 2008 are set out below:

	2008			2007		
	UK \$m	Rest of Group \$m	Total \$m	UK \$m	Rest of Group \$m	Total \$m
<b>Operating profit</b>						
Current service cost	(146)	(107)	(253)	(187)	(113)	(300)
Past service cost	(86)	(28)	(114)	(38)	(6)	(44)
Settlements and curtailments	19	28	47	—	—	—
<b>Total charge to operating profit</b>	<b>(213)</b>	<b>(107)</b>	<b>(320)</b>	<b>(225)</b>	<b>(119)</b>	<b>(344)</b>
<b>Finance expense</b>						
Expected return on post-retirement scheme assets	398	187	585	402	171	573
Interest on post-retirement scheme obligations	(416)	(172)	(588)	(379)	(160)	(539)
Net return	(18)	15	(3)	23	11	34
Charge before taxation	(231)	(92)	(323)	(202)	(108)	(310)
<b>Consolidated statement of recognised income and expense</b>						
Difference between the actual return and the expected return on the post-retirement schemes' assets	(1,185)	(700)	(1,885)	(185)	(24)	(209)
Experience gains/(losses) arising on the post-retirement schemes' obligations	78	4	82	(359)	(62)	(421)
Changes in assumptions underlying the present value of the post-retirement schemes' obligations	894	(323)	571	473	44	517
Actuarial losses recognised	(213)	(1,019)	(1,232)	(71)	(42)	(113)

## MOVEMENT IN POST-RETIREMENT SCHEME OBLIGATIONS

	2008			2007		
	UK \$m	Rest of Group \$m	Total \$m	UK \$m	Rest of Group \$m	Total \$m
<b>Present value of obligation in schemes at beginning of year</b>						
Present value of obligation in schemes at beginning of year	(7,644)	(3,348)	(10,992)	(7,352)	(3,109)	(10,461)
Current service cost	(146)	(107)	(253)	(187)	(113)	(300)
Past service cost	(86)	(28)	(114)	(38)	(6)	(44)
Participant contributions	(43)	(3)	(46)	(29)	(2)	(31)
Benefits paid	375	112	487	311	99	410
Other finance expense	(416)	(172)	(588)	(379)	(160)	(539)
Expenses	8	—	8	9	—	9
Actuarial gain/(loss)	972	(319)	653	114	(18)	96
Settlements and curtailments	19	28	47	—	—	—
Exchange	1,932	246	2,178	(93)	(39)	(132)
<b>Present value of obligations in schemes at end of year</b>	<b>(5,029)</b>	<b>(3,591)</b>	<b>(8,620)</b>	<b>(7,644)</b>	<b>(3,348)</b>	<b>(10,992)</b>

## 23 POST-RETIREMENT BENEFITS CONTINUED

### FAIR VALUE OF SCHEME ASSETS

	UK \$m	Rest of Group \$m	Total \$m	UK \$m	Rest of Group \$m	Total \$m
At beginning of year	6,310	2,644	<b>8,954</b>	6,078	2,493	8,571
Expected return on plan assets	398	187	<b>585</b>	402	171	573
Expenses	(8)	–	<b>(8)</b>	(9)	–	(9)
Actuarial losses	(1,185)	(700)	<b>(1,885)</b>	(185)	(24)	(209)
Exchange	(1,583)	(161)	<b>(1,744)</b>	90	2	92
Employer contributions	235	152	<b>387</b>	216	99	315
Participant contributions	43	3	<b>46</b>	29	2	31
Benefits paid	(375)	(112)	<b>(487)</b>	(311)	(99)	(410)
At end of year	3,835	2,013	<b>5,848</b>	6,310	2,644	8,954

The actual return on the plan assets was a loss of \$1,300m (2007: gain of \$364m; 2006: gain of \$314m).

Included in total assets and obligations for the UK scheme is \$235m in respect of members' defined contribution sections. Costs in respect of defined contribution schemes during the year were \$130m (2007: \$105m; 2006: \$62m).

### TRANSACTIONS WITH PENSION SCHEMES

During the year, the Group made loans to UK and Sweden pension schemes to help them manage their short term liquidity requirements. The maximum balance outstanding in the year was \$220m and the amount outstanding at 31 December 2008 was \$2m.

### RESERVES

Included within the retained earnings reserve is the actuarial reserve. Movements on this reserve are as follows:

	2008 \$m	2007 \$m	2006 \$m
At 1 January	(479)	(401)	(328)
Actuarial losses	(1,232)	(113)	(108)
Deferred tax	340	35	35
At 31 December	(1,371)	(479)	(401)

The cumulative amount of actuarial losses before deferred tax recognised in the statement of recognised income and expense is \$1,867m (2007: \$635m; 2006: \$522m).

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES

### EMPLOYEE COSTS

The average number of people, to the nearest hundred people, employed by the Group is set out in the table below. In accordance with the Companies Act 1985, this includes part-time employees:

Employees	2008	2007	2006
Average number of people employed by the Group in:			
UK	<b>11,000</b>	11,800	11,800
Continental Europe	<b>23,100</b>	25,600	26,600
The Americas	<b>20,900</b>	20,200	18,200
Asia, Africa & Australasia	<b>11,100</b>	10,300	10,000
Continuing operations	<b>66,100</b>	67,900	66,600

The number of people employed by the Group at the end of 2008 was 65,000 (2007: 67,400; 2006: 66,800).

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES CONTINUED

The costs incurred during the year in respect of these employees were:

	2008 \$m	2007 \$m	2006 \$m
Salaries	5,080	5,217	4,580
Social security costs	743	858	832
Pension costs	497	449	390
Other employment costs	596	584	553
	6,916	7,108	6,355

Severance costs of \$546m are not included above (2007: \$724m; 2006: \$66m).

The Directors believe that, together with the basic salary system, the Group's employee incentive schemes provide competitive and market-related packages to motivate employees. They should also align the interests of employees with those of shareholders, as a whole, through long-term share ownership in the Company. The Group's current UK, Swedish and US schemes are described below; other arrangements apply elsewhere.

### BONUS PLANS

#### The AstraZeneca UK Performance Bonus Plan

Employees of participating AstraZeneca UK companies are invited to participate in this bonus plan, which rewards strong individual performance. Bonuses are paid partly in the form of Ordinary Shares in the Company (under the Inland Revenue-approved AstraZeneca All-Employee Share Plan and up to a maximum annual value of £3,000) and partly in cash. A tax-efficient share retention scheme, under which employees leave their bonus shares in trust for three to five years, forms part of the All-Employee Share Plan. The Company also offers UK employees the opportunity to buy Partnership Shares (Ordinary Shares) under the All-Employee Share Plan. Employees may invest up to £1,500 over a 12 month accumulation period and purchase Partnership Shares in the Company with the total proceeds at the end of the period. The purchase price for the shares is the lower of the price at the beginning or the end of the 12 month period. A tax-efficient share retention scheme is also available in respect of Partnership Shares. At the Company's AGM in 2002, shareholders approved the issue of new shares for the purposes of the All-Employee Share Plan.

#### The AstraZeneca Executive Annual Bonus Scheme

This scheme is a performance bonus scheme for Directors and senior employees who do not participate in the AstraZeneca UK Performance Bonus Plan. Annual bonuses are paid in cash and reflect both corporate and individual performance measures. The Remuneration Committee has discretion to reduce or withhold bonuses if business performance falls sufficiently short of expectations in any year such as to make the payment of bonuses inappropriate.

#### The AstraZeneca Deferred Bonus Plan

This plan was introduced in 2006 and is used to defer a portion of the bonus earned under the AstraZeneca Executive Annual Bonus Scheme into Ordinary Shares in the Company for a period of three years. The plan currently operates only in respect of Executive Directors and members of the Senior Executive Team (SET). Awards of shares under this plan are typically made in February each year, the first award having been made in February 2006.

#### The AstraZeneca Performance Share Plan

This plan was approved by shareholders in 2005 for a period of 10 years. Generally, awards can be granted at any time, but not during a close period of the Company. The first grant of awards was made in June 2005. The main grant of awards in 2008 under the plan was in March, at the same time as options were granted under the AstraZeneca Share Option Plan, with a further smaller grant in August. Awards granted under the plan vest after three years subject to a performance condition. For all participants except employees of MedImmune, the performance condition relates to the performance of the Company's total shareholder return compared to that of a selected peer group of other pharmaceutical companies. A separate performance condition applies to employees of MedImmune linked to the achievement of MedImmune business targets. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated, including agreeing performance targets and which employees should be invited to participate. A fuller description of this plan can be found on page 179 in the Directors' Remuneration Report.

#### The AstraZeneca Pharmaceuticals LP Executive Performance Share Plan

This plan was introduced in 2007 and is used to grant awards of performance shares to selected US employees under broadly the same terms as awards are made under the AstraZeneca Performance Share Plan. The main grant of awards in 2008 under the plan was in March, with a further smaller grant in August. Awards granted under the plan vest after three years subject to a performance condition. As with the AstraZeneca Performance Share Plan, for all participants except employees of MedImmune, the performance condition relates to the performance of the Company's total shareholder return compared to that of a selected peer group of other pharmaceutical companies. A separate performance condition applies to employees of MedImmune linked to the achievement of MedImmune business targets. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated, including agreeing performance targets and which employees should be invited to participate.

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES CONTINUED

### The AstraZeneca Pharmaceuticals LP Restricted Stock Unit Award Plan

This plan was introduced in 2007 and provides for the grant of restricted stock unit (RSU) awards to selected employees (predominantly in the US). The RSU Plan is used in conjunction with the AstraZeneca Share Option Plan to provide a mix of restricted stock units and share options. The main grant of awards in 2008 under the plan was in March, with a further smaller grant in August. Awards typically vest on the third anniversary of the date of grant and are contingent on continued employment with the Company. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated.

### The MedImmune, Inc. 2008 Restricted Stock Unit Award Plan

This plan was introduced in 2008 and provides for the grant of restricted stock unit awards to selected employees of MedImmune. This plan is used in conjunction with the AstraZeneca Share Option Plan to provide a mix of restricted stock units and share options. The grant of awards in 2008 under the plan was in March. Awards typically vest on the third anniversary of the date of grant and are contingent on continued employment with the Company. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated.

### The AstraZeneca Restricted Share Plan

This plan was introduced in 2008 and provides for the grant of restricted share awards to key employees, excluding Executive Directors. Awards are made on an ad hoc basis with variable vesting dates. The plan has been used twice in 2008 to make awards to four employees. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated.

### Sweden

In Sweden an all-employee performance bonus plan is in operation, which rewards strong individual performance. Bonuses are paid partly into a fund investing 50% in AstraZeneca equities and partly in cash. The AstraZeneca Executive Annual Bonus Scheme, the AstraZeneca Share Option Plan and the AstraZeneca Performance Share Plan all operate in respect of relevant AstraZeneca employees in Sweden.

### US

In the US, there are two all-employee performance bonus plans in operation, which reward strong individual performance. Annual bonuses are paid in cash. There are also two senior staff incentive schemes, under which approximately 470 participants may be eligible for awards granted as either AstraZeneca ADSs or stock appreciation rights related to AstraZeneca ADSs. AstraZeneca ADSs necessary to satisfy the awards are purchased in the market. The AstraZeneca Share Option Plan, the AstraZeneca Pharmaceuticals LP Executive Performance Share Plan, the AstraZeneca Pharmaceuticals LP Restricted Stock Unit Award Plan, and the MedImmune, Inc. 2008 Restricted Stock Unit Award Plan operate in respect of relevant employees in the US.

### ASTRAZENECA PERFORMANCE SHARE PLAN

	Shares '000	WAFV/ pence
Shares awarded in June 2005	312	1121
Shares awarded in March 2006	280	1486
Shares awarded in May 2006	19	1424
Shares awarded in March 2007	1,611	1372
Shares awarded in August 2007	68	1217
Shares awarded in November 2007	16	1105
Shares awarded in March 2008	1,338	941
Shares awarded in August 2008	14	1326

### ASTRAZENECA PHARMACEUTICALS LP RESTRICTED STOCK UNIT AWARD PLAN

	Units '000	WAFV/ \$
Units awarded in March 2007	755	26.90
Units awarded in November 2007	270	21.56
Units awarded in March 2008	1,313	18.88

<sup>1</sup> Weighted average fair value.

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES CONTINUED

### ASTRAZENECA PHARMACEUTICALS LP EXECUTIVE PERFORMANCE SHARE PLAN

	Shares '000	WAFV <sup>1</sup> \$
Shares awarded in March 2007	38	25.86
Shares awarded in March 2008	2,094	18.88
Shares awarded in August 2008	20	24.46

### MEDIMMUNE, INC. 2008 RESTRICTED STOCK UNIT AWARD PLAN

	Units '000	WAFV <sup>1</sup> \$
Units awarded in March 2008	130	18.88

### ASTRAZENECA RESTRICTED SHARE PLAN

	Shares '000	WAFV <sup>1</sup> pence
Shares awarded in March 2008	51	941
Shares awarded in May 2008	35	2210

<sup>1</sup> Weighted average fair value.

The fair values were determined using a modified version of the binomial model. This method incorporated expected dividends but no other features into the measurements of fair value.

The charge for share-based payments in respect of the AstraZeneca Performance Share Plan, the US incentive share schemes and restricted stock unit award plan is \$53m (2007: \$31m; 2006: \$14m). The plans are equity-settled.

### SHARE OPTION PLANS

At 31 December 2008, there were options outstanding under the Zeneca 1994 Executive Share Option Scheme, the AstraZeneca Savings-Related Share Option Scheme, the AstraZeneca Savings-Related Share Option Plan and the AstraZeneca Share Option Plan.

#### (1) SUMMARY OF THE ASTRAZENECA SHARE OPTION PLAN

This is a share option plan for employees of participating AstraZeneca Group companies which was approved by shareholders at the Company's AGM in 2000. The first grant of options occurred in August 2000. The main grant of options in 2008 under the plan was in March, with a further smaller grant in August. The Remuneration Committee sets the policy for the Company's operation of the plan and, in accordance with the rules of the plan, conducted a review of the plan in 2004.

#### Eligibility

Any AstraZeneca employee may be recommended from time to time for the grant of an option. The Remuneration Committee sets the policy for the Company's operation of the plan including as regards which employees will be eligible to participate.

#### Grant of options

Options may be granted at any time other than during a close period. The grant of options is supervised by the Remuneration Committee, which is comprised wholly of Non-Executive Directors. No payment is required for the grant of an option. Options are not transferable. Options may be granted over AstraZeneca Ordinary Shares or ADSs.

#### Acquisition price

The price per Ordinary Share payable upon the exercise of an option will not be less than an amount equal to the average of the middle-market closing price for an Ordinary Share or ADS of the Company on the London or New York Stock Exchange on the three consecutive dealing days immediately before the date of grant (or as otherwise agreed with HM Revenue & Customs). Where the option is an option to subscribe, the price payable upon exercise cannot be less than the nominal value of an Ordinary Share of the Company.

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES CONTINUED

### Exercise of options

An option will normally be exercisable between three and 10 years following its grant provided any relevant performance condition has been satisfied. Options may be satisfied by the issue of new Ordinary Shares or by existing Ordinary Shares purchased in the market. The Remuneration Committee sets the policy for the Company's operation of the plan including as regards whether any performance target(s) will apply to the grant and/or exercise of each eligible employee's option. Options normally lapse on cessation of employment. Exercise is, however, permitted for a limited period following cessation of employment either for reasons of injury or disability, redundancy or retirement, or at the discretion of the Remuneration Committee, and on an amalgamation, take-over or winding-up of the Company.

### (2) SUMMARY OF THE ASTRAZENECA SAVINGS-RELATED SHARE OPTION SCHEME AND THE ASTRAZENECA SAVINGS-RELATED SHARE OPTION PLAN ('SAVE SCHEMES')

The AstraZeneca Savings-Related Share Option Scheme was approved by shareholders in 1994 for a period of 10 years. The last grant of options under this scheme was made in September 2002. In 2003, shareholders approved the AstraZeneca Savings-Related Share Option Plan for a period of 10 years. The first grant of options under this plan was made in September 2003. The following sections apply to both the AstraZeneca Savings-Related Share Option Scheme and the AstraZeneca Savings-Related Share Option Plan, which have broadly similar rules.

### Eligibility

UK-resident employees of participating AstraZeneca companies are automatically eligible to participate.

### Grant of options

Invitations to apply for options may be issued within six weeks after the announcement by the Company of its results for any period and at other times in circumstances considered to be exceptional by the Directors. No invitations may be issued later than 10 years after the approval of the scheme by shareholders. Options may only be granted to employees who enter into HM Revenue & Customs-approved savings contracts with the savings body nominated by the Company, under which monthly savings of a fixed amount (currently not less than £5 nor more than £250) are made over a period of three or five years. The number of Ordinary Shares over which an option is granted will be such that the total amount payable on its exercise will be the proceeds on maturity of the related savings contract. No payment will be required for the grant of an option. Options are not transferable.

### Individual participation

Monthly savings by an employee under all savings contracts linked to options granted under any Save As You Earn scheme may not exceed £250 or such lower amounts as may be determined by the Directors.

### Acquisition price

The price per Ordinary Share payable upon the exercise of an option will not normally be less than the higher of:

- (a) 90% of the arithmetical average of the middle-market quotations for an Ordinary Share on the London Stock Exchange on three consecutive dealing days shortly before the date on which invitations to apply for options are issued (provided that no such day may fall before the Company last announced its results for any period) or such other dealing day or days falling within the six week period for the issue of invitations, as the Directors may decide; and
- (b) the nominal value of an Ordinary Share (unless the option is expressed to relate only to existing Ordinary Shares).

### Exercise of options

An option will normally be exercisable only for six months commencing on the third or fifth anniversary of the commencement of the related savings contract. Options are satisfied by the issue of new Ordinary Shares. Options normally lapse on cessation of employment. Exercise is, however, permitted for a limited period (irrespective of the period during which the option has been held) following cessation of employment in certain compassionate circumstances or where an option has been held for more than three years (except on dismissal for misconduct) and on an amalgamation, take-over or winding-up of the Company.

### (3) SUMMARY OF THE ZENECA 1994 EXECUTIVE SHARE OPTION SCHEME ('1994 SCHEME')

The Zeneca 1994 Executive Share Option Scheme was introduced in 1994. The last date for the grant of options was 16 March 2000 and the scheme has been replaced by the AstraZeneca Share Option Plan. Options granted under the 1994 Scheme are normally exercisable between three and 10 years following grant, provided the relevant performance condition has been satisfied. Options are satisfied by the issue of new Ordinary Shares. The performance condition applicable to the 1994 Scheme was that earnings per share must have grown by at least the increase in the UK Retail Price Index over three years plus 3% per annum. Satisfaction of this condition was tested annually by reference to the audited financial statements. All options granted under the 1994 Scheme have become exercisable, the performance conditions having been satisfied.

## 24 EMPLOYEE COSTS AND SHARE OPTION PLANS FOR EMPLOYEES CONTINUED

	AstraZeneca Share Option Plan		1994 Scheme		SAYE Schemes		ASVIP	
	Options '000	WAEP <sup>1</sup> pence	Options '000	WAEP <sup>1</sup> pence	Options '000	WAEP <sup>1</sup> pence	Shares under option '000	WAEP <sup>1</sup> SEK
<b>At 1 January 2006</b>								
Options outstanding	50,079	2670	5,958	2658	3,438	2053	309	442
<b>Movements during 2006</b>								
Options granted	9,266	2977	–	–	280	3001	–	–
Options exercised	(18,543)	2708	(4,038)	2665	(289)	2278	–	–
Options forfeited	(1,078)	2669	(14)	2862	(218)	2473	(309)	442
Weighted average fair value of options granted during the year		857				943		
<b>At 31 December 2006</b>								
Options outstanding	39,724	2428	1,906	2371	3,211	2087	–	–
<b>Movements during 2007</b>								
Options granted	7,312	2737	–	–	1,074	2164	–	–
Options exercised	(2,770)	2648	(321)	2426	(1,327)	1785	–	–
Options forfeited	(1,706)	2745	(95)	2603	(238)	2528	–	–
Weighted average fair value of options granted during the year		682				616		
<b>At 31 December 2007</b>								
Options outstanding	42,560	2451	1,490	2364	2,720	2226	–	–
<b>Movements during 2008</b>								
Options granted	14,858	1887	–	–	483	2398	–	–
Options exercised	(2,577)	2204	(99)	2620	(675)	2062	–	–
Options forfeited	(2,273)	2622	(106)	2594	(388)	2291	–	–
Weighted average fair value of options granted during the year		404				499		
<b>At 31 December 2008</b>								
Options outstanding	52,568	2978	1,285	2934	2,140	2304	–	–
Range of exercise prices		1882p to 4381p		2505p to 3049p		2164p to 3001p		n/a
Weighted average remaining contractual life		2,456 days		415 days		1,193 days		n/a
Options exercisable	24,788	2689	1,285	2702	75	2231	–	n/a

<sup>1</sup> Weighted average exercise price.

The Astra Shareholder Value Incentive Plan ('ASVIP') was introduced in 1994 and last granted options in March 2000. There were no options outstanding under this scheme as at 31 December 2008.

The fair value of options is estimated at the date of grant using the Black-Scholes option pricing model. The following table gives the assumptions applied to the options granted in the respective periods shown. Expectations of early exercise are incorporated into the model.

	2008	2007	2006
Average share price (pence)	<b>2295</b>	2599	3020
Weighted average exercise price (pence)			
AstraZeneca Share Option Plan	<b>1887</b>	2737	2977
SAYE schemes	<b>2398</b>	2164	3001
Expected volatility (%)	<b>25.0</b>	25.0	30.0
Dividend yield (%)	<b>3.4</b>	2.6	2.3
Risk-free interest rate (%)	<b>4.3</b>	4.8	4.3
Expected lives: AstraZeneca Share Option Plan (years)	<b>6.0</b>	6.0	6.0
Expected lives: SAYE schemes (years)	<b>4.0</b>	4.3	4.1

The expected volatility is based on the historic volatility (calculated based on the weighted average remaining life of the share options) adjusted for any expected changes to future volatility due to publicly available information.

No other features of options granted were incorporated into the measurement of fair value.

The charge for share-based payments in respect of share options is \$125m (2007: \$124m; 2006: \$125m) which is comprised entirely of equity-settled transactions.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES

	2008 \$m	2007 \$m	2006 \$m
<b>Commitments</b> Contracts placed for future capital expenditure not provided for in these accounts	332	571	383

Included in the above total are contracts related to certain product purchase and licence agreements with contingent consideration, the amounts of which are variable depending upon particular 'milestone' achievements. Sales of the products to which these milestones relate could give rise to additional payments, contingent upon the sale levels achieved. AstraZeneca generally has the right to terminate these agreements at no cost. Guarantees and contingencies arising in the ordinary course of business, for which no security has been given, are not expected to result in any material financial loss.

### ARRANGEMENTS WITH MERCK

#### Introduction

In 1982, Astra AB set up a joint venture with Merck & Co., Inc. ("Merck") for the purposes of selling, marketing and distributing certain Astra products in the US. In 1998, this joint venture was restructured (the "Restructuring"). Under the agreements relating to the Restructuring (the "Agreements"), a US limited partnership was formed, in which Merck is the limited partner and AstraZeneca is the general partner, and AstraZeneca obtained control of the joint venture's business subject to certain limited partner and other rights held by Merck and its affiliates. These rights provide Merck with safeguards over the activities of the partnership and place limitations on AstraZeneca's commercial freedom to operate. The Agreements provided for:

- > a payment to Merck in the event of a business combination between Astra and a third party in order for Merck to relinquish certain claims to that third party's products;
- > annual contingent payments; and
- > termination arrangements which cause Merck to relinquish its interests in AstraZeneca's products and activities in stages, some of which are mandatory and others optional.

These elements are discussed in further detail below, together with a summary of their accounting treatments.

#### Payment in the event of a business combination

On the merger of Astra and Zeneca, a one-time Lump Sum Payment of \$809m was triggered. As a result of this payment, Merck relinquished any claims it may have had to Zeneca products.

This payment was expensed at the point of merger since it caused no incremental benefits over the prior years' aggregate Astra and Zeneca performance to accrue to the merged AstraZeneca entity.

#### Annual contingent payments

AstraZeneca makes ongoing payments to Merck based on sales of certain of its products in the US (the "contingent payments" on the "agreement products"). As a result of the merger of Astra and Zeneca in 1999, these contingent payments (excluding those in respect of *Prilosec* and *Nexium*) could not be less than annual minimum sums between 2002 and 2007 ranging from \$125m to \$225m. AstraZeneca's payments exceeded the minimum level in all years.

AstraZeneca will continue to make contingent payments to Merck until at least 2012. Contingent payments (excluding those in respect of *Prilosec* and *Nexium*) will cease in 2010 if AstraZeneca exercises the First Option (as discussed under "First Option" below); contingent payments in respect of *Prilosec* and *Nexium* will cease in 2012 if AstraZeneca exercises the Second Option at that time (as discussed under "Second Option" below).

The annual contingent payments on agreement products are expensed as incurred.

#### Termination arrangements

The Agreements provided for arrangements and payments under which, subject to the exercise of certain options, the rights and interests in AstraZeneca's activities and products held by Merck immediately prior to the merger would be terminated, including details of:

- > the Advance Payment;
- > the Partial Retirement;
- > the True-Up;
- > the Loan Note Receivable;
- > the First Option; and
- > the Second Option.

#### Advance Payment

The merger between Astra and Zeneca in 1999 triggered the first step in the termination arrangements. Merck relinquished all rights, including contingent payments on future sales, to potential Astra products with no existing or pending US patents at the time of the merger. As a result,

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

AstraZeneca now has rights to such products and is relieved of potential obligations to Merck and restrictions in respect of those products (including annual contingent payments), affording AstraZeneca substantial freedom to exploit the products as it sees fit.

At the time of the merger, the Advance Payment was paid. It was calculated as the then net present value of \$2.8bn discounted from 2008 to the date of merger at a rate of 13% per annum and amounted to \$967m. It was subject to a true-up in 2008 (as discussed under "True-Up" below).

### Partial Retirement

In March 2008, there was a partial retirement of Merck's limited partnership interest by payment to Merck of an amount calculated as a multiple of the average annual contingent payments from 2005 to 2007 on the relevant products, plus \$750m. The payment was \$4,271m. The amount payable under the Partial Retirement was estimated to be \$4.3bn in the 2007 financial statements.

Upon the Partial Retirement, Merck's rights in respect of certain of the agreement products ended. The products covered by the Partial Retirement include *Toprol-XL*, *Pulmicort*, *Rhinocort* and *Symbicort*.

### True-Up

In 2008, in accordance with the Agreements, there was a True-Up of the Advance Payment. The True-Up amount was based on a multiple of the average annual contingent payments from 2005 to 2007 in respect of all the agreement products with the exception of *Prilosec* and *Nexium* (subject to a minimum of \$6.6bn), plus other defined amounts (totalling \$912m). In accordance with the Agreements, the calculated amount was then reduced by the Appraised Value (as discussed under "First Option" below), the Partial Retirement and the Advance Payment (at its undiscounted amount of \$2.8bn). This True-Up amount was settled in an amount equal to \$241m owed by Merck to AstraZeneca. The amount payable under the True-Up was estimated to be \$0.2bn in the 2007 financial statements, payable by Merck to AstraZeneca.

### Loan Note Receivable

Included in the assets and liabilities covered by the Restructuring was a loan note receivable by AstraZeneca from Merck with a face value of \$1.38bn. In 2008, at the same time as the settlement of the Partial Retirement and the True-Up, Merck settled the loan note receivable by paying AstraZeneca \$1.38bn.

If Merck had exercised the First Option in 2008, the net minimum payment that would have been made to Merck would have been \$3.3bn, being the minimum combined payments of \$4.7bn specified in the Agreements on the Partial Retirement, the True-Up and First Option, less the repayment of the loan note of \$1.38bn. In accounting for the Restructuring in 1998, the loan note was included in the determination of the fair values of the assets and liabilities to be acquired. At that time, the loan note was ascribed a fair value of zero on acquisition and on the balance sheet, because it was estimated that the net minimum payment of \$3.3bn equated to the fair value of the rights to be acquired under the Partial Retirement, True-Up and First Option.

### First Option

In accordance with the Agreements, in 2008 a calculation was made of the Appraised Value, being the net present value of the future contingent payments in respect of all agreement products not covered by the Partial Retirement, other than *Prilosec* and *Nexium*. The Appraised Value was calculated in 2008 as \$647m. In the 2007 financial statements, this amount was estimated to be \$0.6bn.

Payment of the Appraised Value to Merck in March 2008 would have taken place only if Merck had exercised the First Option in 2008. Merck did not exercise this option. AstraZeneca may exercise the First Option in 2010 for a sum equal to the 2008 Appraised Value.

Upon exercise of the First Option, Merck will relinquish its rights over the agreement products not covered by the Partial Retirement, other than *Nexium* and *Prilosec*. If AstraZeneca does not exercise the First Option, the contingent payment arrangements in respect of these agreement products will continue (as will AstraZeneca's other obligations and restrictions in respect of these products) and the Appraised Value will not be paid. Products covered by the First Option include *Entocort*, *Atacand*, *Plendil* and certain compounds still in development.

### Second Option

Provided that the First Option is exercised, AstraZeneca may exercise a Second Option to repurchase Merck's interests in *Prilosec* and *Nexium* in the US. This option is exercisable by AstraZeneca in 2012, or in 2017, or if combined annual sales of the two products fall below a minimum amount. AstraZeneca's exercise of the Second Option will end the contingent payments in respect of *Prilosec* and *Nexium* and will effectively end AstraZeneca's relationship with, and obligations to, Merck (other than some residual manufacturing arrangements). The exercise price for the Second Option is the net present value of the future annual contingent payments on *Prilosec* and *Nexium* as determined at the time of exercise. If the Second Option is exercised, Merck will then have relinquished all its interests in the partnership and the agreement products, including rights to contingent payments. The exercise price of the Second Option cannot be determined at this time.

### Accounting treatment of termination arrangements

AstraZeneca considers that the termination arrangements described above represent the acquisition, in stages, of Merck's interests in the partnership and agreement products (including Merck's rights to contingent payments) and depend, in part, on the exercise of the First and Second Options. The effects will only be reflected in the Financial Statements as these stages are reached. If and when all such payments are made, AstraZeneca will have unencumbered discretion in its operations in the US market.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

AstraZeneca anticipates that the benefits that accrue under all of the termination arrangements arise:

- > Currently, from the substantial freedom over products acquired or discovered post-merger.
- > On occurrence of each stage of such arrangements, from enhanced contributions from, and substantial freedom over, those products that have already been launched (for example, *Pulmicort*, *Symbicort*, *Rhinocort* and *Atacand*), and those that are in development.
- > Economic benefits include relief from contingent payments, anticipated cost savings from cessation of manufacturing arrangements and other cost efficiencies, together with the strategic advantages of increased freedom to operate.

The Advance Payment has been accounted for as an intangible asset and is being amortised over 20 years. This approach reflects the fact that, under the Agreements, AstraZeneca has acquired rights relieving it of potential obligations and restrictions in respect of Astra products with no existing or pending patents at the time of merger. Although these rights apply in perpetuity, the period of amortisation of 20 years has been chosen to reflect the typical timescale of development and marketing of a product.

The net payment made in 2008, consisting of the Partial Retirement of \$4.271bn less the True-Up of \$241m and loan note receivable of \$1.38bn, in total \$2.6bn, has been capitalised as intangible assets.

Part of the net payment made in 2008 resulted in AstraZeneca acquiring Merck's interests in certain AstraZeneca products, including *Pulmicort*, *Rhinocort*, *Symbicort* and *Toprol-XL*. Consequently AstraZeneca no longer has to make contingent payments on these products to Merck and has obtained the ability to fully exploit these products and to fully exploit other opportunities in the Respiratory therapy area that AstraZeneca was previously prevented from doing by Merck's interests in these products. Intangible assets aggregating \$994m have been recognised in respect of these acquired product rights and these are being amortised over various periods, giving rise to an annual expense of approximately \$60m going forward.

The balance of the net payment made in 2008 represents a payment on account for the product rights that will be acquired in the event that the First and the Second Options are exercised by AstraZeneca. Intangible assets aggregating \$1.656bn have been recognised in the year in relation to the payment. This balance will not be subject to amortisation until each of the options is exercised and the related product rights are acquired. Should it become probable that the First Option will not be exercised, all the payments on account will be expensed immediately. If after the First Option has been exercised it becomes probable that the Second Option will not be exercised, the payments on account for the product rights to be acquired under the Second Option will be expensed immediately.

### Environmental costs and liabilities

The Group's expenditure on environmental protection, including both capital and revenue items, relates to costs which are necessary for implementing internal systems and programmes and meeting legal and regulatory requirements for processes and products.

They are an integral part of normal ongoing expenditure for carrying out the Group's research, manufacturing and commercial operations and are not separated from overall operating and development costs. There are no known changes in legal, regulatory or other requirements resulting in material changes to the levels of expenditure for 2006, 2007 or 2008.

In addition to expenditure for meeting current and foreseen environmental protection requirements, the Group incurs costs in investigating and cleaning up land and groundwater contamination. In particular, AstraZeneca and/or its affiliates have environmental liabilities at some currently or formerly owned, leased and third party sites.

In the US, the AstraZeneca affiliate, Zeneca Inc., and/or its indemnitees, have been named as potentially responsible parties (PRPs) or defendants at approximately 17 sites where Zeneca Inc. is likely to incur future investigation, remediation or operation and maintenance costs under federal or state, statutory or common law environmental liability allocation schemes. Similarly, the AstraZeneca affiliate, Stauffer Management Company LLC (SMC), which was established in 1987 to own and manage certain assets of Stauffer Chemical Company acquired that year, and/or its indemnitees, have been named as PRPs or defendants at approximately 28 sites where SMC is likely to incur future investigation, remediation or operation and maintenance costs under federal or state, statutory or common law environmental liability allocation schemes. In Europe and other parts of the world outside the US, AstraZeneca has given indemnities to third parties in respect of approximately 45 sites. These environmental liabilities arise from legacy operations that are not part of the Group's current pharmaceuticals business and, at most of these sites, remediation, where required, is either completed or nearing completion.

AstraZeneca has made provisions for the estimated costs of future environmental investigation, remediation and operation and maintenance activity beyond normal ongoing expenditure for maintaining the Group's research and development and manufacturing capacity and product ranges where a present obligation exists; it is probable that such costs will be incurred and can be estimated reliably. With respect to such estimated future costs, there were provisions at 31 December 2008 in the aggregate of \$118.9m, which mainly relate to the US. These provisions do not include possible additional costs that are not currently probable. Where we are jointly liable or otherwise have cost sharing agreements with third parties, we reflect only our share of the obligation. Where the liability is insured in part or in whole by insurance or other arrangements for reimbursement, an asset is recognised to the extent that this recovery is virtually certain.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

It is possible that the Company, or its affiliates, could incur future environmental costs beyond the extent of our current provisions. The extent of such possible, additional costs is inherently difficult to estimate due to a number of factors, including, but not limited to: (1) the nature and extent of claims that may be asserted in the future; (2) whether the Company or any of its affiliates has or will have any legal obligation with respect to asserted or unasserted claims; (3) the type of remedial action, if any, that may be selected at sites where the remedy is presently not known; (4) the potential for recoveries from or allocation of liability to third parties; and (5) the length of time that the environmental investigation, remediation and liability allocation process can take. Notwithstanding and subject to the foregoing, it is estimated that potential additional loss for future environmental investigation, remediation and remedial operation and maintenance activity above and beyond our provisions could be, in aggregate, in the order of \$15-30m, which relates solely to the US.

### Legal proceedings

AstraZeneca is involved in various legal proceedings considered typical to its businesses, including litigation relating to employment, product liability, commercial disputes, infringement of intellectual property rights, the validity of certain patents, anti-trust, securities laws and governmental investigations. The more significant matters are discussed below.

Most of the claims involve highly complex issues. Often, these issues are subject to substantial uncertainties and therefore the probability of a loss, if any, being sustained and an estimate of the amount of any loss are difficult to ascertain. Consequently, for a majority of these claims, it is not possible to make a reasonable estimate of the expected financial effect, if any, that will result from ultimate resolution of the proceedings. In these cases, AstraZeneca discloses information with respect to the nature and facts of the cases.

With respect to each of the legal proceedings described below, other than those which have been disposed of, we are unable to make estimates of the possible loss or range of possible losses at this stage, other than where noted in the case of the European Commission fine, which is under appeal, and the Class 2 and 3 settlements in the Average Wholesale Price litigation. We also do not believe that disclosure of the amount sought by plaintiffs, if that is known, would be meaningful with respect to those legal proceedings. This is due to a number of factors including: the stage of the proceedings (in many cases trial dates have not been set) and the overall length and extent of pre-trial discovery; the entitlement of the parties to an action to appeal a decision; clarity as to theories of liability, damages and governing law; uncertainties in timing of litigation; and the possible need for further legal proceedings to establish the appropriate amount of damages, if any.

However, although there can be no assurance regarding the outcome of any of the legal proceedings referred to in this Note 25 to the Financial Statements, based on management's current and considered view of each situation, we do not currently expect them to have a materially adverse effect on our financial position. This position could of course change over time, not least because of the factors referred to in the above paragraph.

In cases that have been settled or adjudicated, or where quantifiable fines and penalties have been assessed and which are not subject to appeal, or where a loss is probable and we are able to make a reasonable estimate of the loss, we indicate the loss absorbed or the amount of the provision accrued. No provisions have been made for any such claims and legal costs incurred discussed below other than the European Commission fine which has been paid and the settlement with certain parties under the Average Wholesale Price litigation.

Where it is considered that the Group is more likely than not to prevail, legal costs involved in defending the claim are charged to the income statement as they are incurred.

Where it is considered that the Group has a valid contract which provides the right to reimbursement (from insurance or otherwise) of legal costs and/or all or part of any loss incurred or for which a provision has been established, the best estimate of the amount expected to be received is recognised as an asset.

Assessments as to whether or not to recognise provisions or assets and of the amounts concerned usually involve a series of complex judgements about future events and can rely heavily on estimates and assumptions. AstraZeneca believes that the provisions recorded are adequate based on currently available information and that the insurance recoveries recorded will be received. However, given the inherent uncertainties involved in assessing the outcomes of these cases and in estimating the amount of the potential losses and the associated insurance recoveries, we could in future periods incur judgments or insurance settlements that could have a material adverse effect on our results in any particular period.

Intellectual property claims include challenges to the Group's patents on various products or processes and assertions of non-infringement of patents. A loss in any of these cases could result in loss of patent protection on the related product. The consequences of any such loss could be a significant decrease in sales of the product, which could materially affect the future results of the Group. The lawsuits pending against companies that have filed ANDAs in the US, seeking to market generic forms of products sold by the Group prior to the expiry of the applicable patents covering these products, typically include allegations of non-infringement, invalidity and unenforceability of these patents. In the event that the Group is not successful in these actions or the statutory 30-month stay expires before a ruling is obtained, the companies involved will also have the ability, subject to FDA approval, to introduce generic versions of the product concerned.

### ABRAXANE® (PACLITAXEL PROTEIN-BOUND PARTICLES FOR INJECTABLE SUSPENSION) (ALBUMIN-BOUND)

AstraZeneca is party to an agreement with Abraxis BioScience, LLC, (Abraxis) to co-promote Abraxane®. In July 2006, Elan Pharma International Limited filed a lawsuit in the US District Court for the District of Delaware against Abraxis alleging that Abraxis infringes two US patents in connection with the marketing, use and sale of Abraxane®. Elan did not name AstraZeneca in the complaint, nor did it seek an injunction in respect of AstraZeneca's sales of Abraxane®. There was a jury judgment against Abraxis in the litigation in June 2008, which had no impact on AstraZeneca.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

Subsequently, in November 2008, AstraZeneca entered into a conditional agreement with Abraxis under which Abraxis would re-acquire exclusive rights to market Abraxane in the US, subject to the approval of the board of Abraxis' parent company. Pursuant to the agreement, the board of Abraxis' parent company ended the Co-Promotion Agreement on 2 January 2009. Under the agreement, Abraxis will pay AstraZeneca a \$268m fee on 31 March 2009. This matter will no longer be reported.

### **ACCOLATE (ZAFIRLUKAST)**

In May 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Dr. Reddy's Laboratories Ltd and Dr. Reddy's Laboratories, Inc. (together Dr. Reddy's) that it had submitted an ANDA to the FDA for Accolate. AstraZeneca lists seven patents referencing Accolate in the FDA's Orange Book. Dr. Reddy's did not challenge two listed patents, US Patent Nos. 4,859,692 and 5,583,152, which expire in September 2010. As a result, Dr. Reddy's cannot market its zafirlukast product before the 2010 expiration date of these two patents. Dr. Reddy's challenged the five remaining patents alleging non-infringement, invalidity or unenforceability. In June 2008, AstraZeneca commenced patent infringement litigation against Dr. Reddy's in the US District Court for the District of New Jersey for infringement of three of the five remaining listed patents, US Patent Nos. 5,319,097, 5,482,963 and 6,143,775. The remaining two patents listed in the FDA Orange Book have expiration dates in December 2011 and March 2014. In July 2008, Dr. Reddy's responded to AstraZeneca's pleading. Discovery proceeds. No trial date has been set.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting Accolate.

### **ATACAND (CANDESARTAN CILEXETIL)**

In March and April 2008, AstraZeneca and Takeda received Paragraph IV Certification notice-letters from Teva Pharmaceuticals USA Inc. (Teva), notifying AstraZeneca and Takeda that it had filed an ANDA with the FDA, seeking approval to market a generic version of Atacand in the 4mg, 8mg, 16mg and 32mg doses prior to the expiration of US Patent No. 5,534,534 (the '534 patent), which expires in 2013. AstraZeneca lists three patents referencing Atacand in the FDA's Orange Book. Teva's notice alleges that its products do not infringe the '534 patent. Teva did not challenge the remaining two listed compound patents, which expire in 2011 and 2012 respectively. As a result, Teva cannot market candesartan cilexetil before June 2012. AstraZeneca and Takeda did not bring an action for patent infringement in respect of the '534 patent.

In July 2008, AstraZeneca and Takeda received a Paragraph IV Certification notice-letter from Mylan, Inc. (Mylan) relating to an ANDA submitted by Matrix Laboratories Ltd with respect to all four dose forms of candesartan cilexetil, alleging non-infringement of the '534 patent. Mylan did not challenge the two compound patents listed in the FDA Orange Book. As a result, Mylan cannot market candesartan cilexetil before June 2012. AstraZeneca did not bring an action for patent infringement in respect of the '534 patent.

### **ATACAND HCT (CANDESARTAN CILEXETIL AND HYDROCHLOROTHIAZIDE)**

In September 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Mylan, Inc. (Mylan) notifying AstraZeneca that it had submitted an ANDA for Atacand HCT, a combination product containing candesartan cilexetil and hydrochlorothiazide in the 32/12.5mg and 16/12.5mg dose forms. AstraZeneca lists five patents referencing Atacand HCT in the FDA's Orange Book. Mylan's notice alleges non-infringement, invalidity or unenforceability in respect of US Patent Nos. 5,534,534, 5,721,263 and 5,958,961. Mylan did not challenge the two listed compound patents, the latter of which expires in June 2012. As a result, Mylan cannot market candesartan cilexetil and hydrochlorothiazide before June 2012. AstraZeneca did not file a complaint for patent infringement.

### **CRESTOR (ROSVUSTATIN)**

#### **Product liability**

From 2004 to present, AstraZeneca in the US was served with 16 individual lawsuits in various US jurisdictions, alleging injury in association with the use of Crestor. Fourteen of the cases were dismissed in early stages, and another was dismissed after the court granted AstraZeneca's motion for summary judgment in June 2007. These decisions were not appealed by the plaintiffs. AstraZeneca intends to vigorously defend the remaining case, which is still in its preliminary stage.

#### **Patent litigation – US**

AstraZeneca lists three patents referencing Crestor in the FDA Orange Book: No. RE37,314 covering the active ingredient (the '314 patent), No. 6,316,460 covering formulations (the '460 patent), and No. 6,858,618 covering medical use (the '618 patent). In the fourth quarter of 2007, AstraZeneca received Paragraph IV Certification notice-letters from Apotex, Inc. (Apotex), Aurobindo Pharma Limited (Aurobindo), Cobalt Pharmaceuticals Inc. and Cobalt Laboratories Inc. (together Cobalt), Glenmark Pharmaceuticals Inc. USA (Glenmark), Mylan Pharmaceuticals, Inc. (Mylan), Par Pharmaceutical, Inc. (Par), Sandoz, Inc. (Sandoz), Sun Pharmaceuticals Industries Limited (Sun) and Teva Pharmaceuticals USA, Inc. (Teva). Each entity notified AstraZeneca that it had submitted an ANDA to the FDA for approval to market Crestor 5mg, 10mg, 20mg and 40mg rosuvastatin calcium tablets prior to the expiration of one or more of AstraZeneca's three FDA Orange Book-listed patents. The notice-letters informed AstraZeneca that each respective ANDA contained a Paragraph IV Certification alleging non-infringement, invalidity or unenforceability of one or more of AstraZeneca's three patents. In December 2007, in response to notice-letters from seven of the nine ANDA-filers, AstraZeneca Pharmaceuticals LP, AstraZeneca UK Limited, IPR Pharmaceuticals, Inc., and AstraZeneca's licensor, Shionogi Seiyaku Kabushiki Kaisha (Shionogi), filed separate lawsuits in the US District Court for the District of Delaware, against Apotex, Aurobindo, Cobalt, Mylan, Par, Sandoz and Sun for infringement of the patent covering rosuvastatin calcium, the active ingredient in Crestor tablets. AstraZeneca did not file patent infringement actions against Teva and Glenmark because they did not seek approval to market products before the 2016 expiration date of the patent covering the active ingredient. In addition to filing actions in the US District Court for the District of Delaware, for procedural reasons, AstraZeneca Pharmaceuticals LP, AstraZeneca UK Limited, IPR Pharmaceuticals, Inc. and Shionogi filed three duplicate patent infringement actions against Mylan, Aurobindo and Cobalt in US District Courts in West Virginia, New Jersey and Florida.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

respectively. Aurobindo answered the duplicate action in New Jersey. After Mylan and Cobalt conceded jurisdiction of the Delaware District Court in January 2008, AstraZeneca dismissed the duplicate actions in West Virginia and Florida.

In January 2008, each of the seven ANDA-filers sued by AstraZeneca in the District of Delaware for infringement of the '314 patent answered, counterclaimed, or otherwise responded to AstraZeneca's pleadings. AstraZeneca replied or responded as allowed. In response, some defendants submitted jurisdictional motions seeking dismissals of parties and claims. The District Court heard oral argument on the jurisdictional motions in July 2008. In November 2008, the court issued a magistrate's Report and Recommendation Regarding Motions to Dismiss deciding the defendants' various jurisdictional motions. In December 2008, Aurobindo filed objections to the Report. In January 2009, the Court adopted the magistrate's recommendations in respect of all parties except as to Aurobindo and its pending objections. Later in January 2009, AstraZeneca responded to Aurobindo's objections.

Although AstraZeneca did not sue Apotex for infringement of the '460 patent, in March 2008 Apotex filed a declaratory judgment lawsuit against AstraZeneca based on AstraZeneca's '460 patent in the US District Court, Middle District of Florida.

In March 2008, AstraZeneca moved before the Judicial Panel on Multi-District Litigation (JPMDL) for co-ordination and consolidation of all *Crestor* pre-trial matters by the Delaware Court. In June 2008, the JPMDL granted AstraZeneca's motion for co-ordination and consolidation in the District of Delaware of all current ANDA matters involving *Crestor*. In June 2008, the JPMDL ordered Apotex's in Florida declaratory judgment action against AstraZeneca and AstraZeneca's duplicate suit against Aurobindo in the District of New Jersey transferred to the District of Delaware for pre-trial co-ordination. In September 2008, Apotex voluntarily dismissed its transferred Florida declaratory judgment lawsuit against AstraZeneca.

In their responses to AstraZeneca's complaints, Cobalt, Par and Sandoz pleaded declaratory judgment counterclaims based on the '460 patent or the '618 patent or a third unlisted AstraZeneca patent directed to a crystalline form of rosuvastatin. Those counterclaims were later dismissed.

In June 2008, Teva notified AstraZeneca that it had amended its previously filed ANDA for approval to market *Crestor* rosuvastatin calcium tablets. Teva's amended ANDA contained a Paragraph IV Certification alleging non-infringement and invalidity in respect of AstraZeneca's '314 patent. In July 2008, AstraZeneca Pharmaceuticals LP, AstraZeneca UK Limited, IPR Pharmaceuticals, Inc., and AstraZeneca's licensor, Shionogi, filed a lawsuit in the US District Court for the District of Delaware, against Teva for infringement of the '314 patent. In July 2008, Teva answered AstraZeneca's pleading.

In September 2008, the Delaware District Court issued an amended scheduling order covering all of the *Crestor* ANDA matters subject to the Multi-District Litigation order, including the new lawsuit directed to Teva's amended ANDA. The consolidated matter proceeds.

In October 2008, in a separate action, Teva Pharmaceuticals Industries Ltd., Teva's Israeli parent corporation (Teva Ltd.), filed a patent infringement lawsuit against AstraZeneca Pharmaceuticals LP, AstraZeneca PLC, AstraZeneca UK Limited and IPR Pharmaceuticals, Inc. (together AstraZeneca) in the Eastern District of Pennsylvania. The complaint alleges that the manufacture, use and sale of *Crestor* 5mg, 10mg, 20mg and 40mg tablets infringe a formulation patent owned by Teva Ltd. In January 2009, AstraZeneca responded to Teva Ltd's pleading.

### Patent litigation – Canada

In September 2008, AstraZeneca Canada Inc. received a Notice of Allegation from Novopharm Limited (Novopharm) in respect of Canadian Patents Nos. 2,072,945 (the '945 patent) and 2,313,783 (the '783 patent) listed on the Patent Register in Canada for *Crestor*. Novopharm claims that the '945 patent is invalid and that the '783 patent has not been infringed. AstraZeneca responded by commencing a court application in October 2008 under the Patented Medicines (Notice of Compliance) Regulations, seeking an order prohibiting the Minister of Health from issuing a Notice of Compliance (marketing approval) to Novopharm until after expiry of the patents.

In November 2008, AstraZeneca Canada Inc. received a Notice of Allegation from Apotex in respect of the Canadian '945 and '783 patents listed on the Patent Register in Canada for *Crestor*. Apotex claims that the '945 patent is invalid and that the '783 patent would not be infringed and is invalid. AstraZeneca responded by commencing a court application in December 2008 under the Patented Medicines (Notice of Compliance) Regulations, seeking an order prohibiting the Minister of Health from issuing a Notice of Compliance (marketing approval) to Apotex until after expiry of the patents.

As a consequence of AstraZeneca Canada's legal actions seeking prohibition orders, neither Novopharm nor Apotex can obtain a Notice of Compliance for its rosuvastatin calcium tablets until the earlier of the disposition of the respective court application in its favour or, unless a Prohibition Order is granted, 24 months after the date on which the respective court application was commenced (assuming its regulatory submission is approvable by that date).

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting *Crestor*.

### ENTOCORT EC (BUDESONIDE)

AstraZeneca lists two patents in the FDA Orange Book referencing *Entocort EC*. In April 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Barr Laboratories (Barr) notifying AstraZeneca that it had submitted an ANDA to the FDA seeking approval to market a generic form of AstraZeneca's *Entocort EC* prior to the expiration of the two patents. Barr's notice alleges non-infringement and invalidity. In May 2008, AstraZeneca filed a patent infringement action against Barr in the US District Court for the District of Delaware. In June 2008, Barr responded and filed counterclaims alleging non-infringement and invalidity. No trial date has been set.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

In June 2008, AstraZeneca received another Paragraph IV Certification notice-letter on behalf of generic drug manufacturer Mylan Pharmaceuticals Inc. (Mylan), that it had submitted an ANDA to the FDA for approval to market a generic version of AstraZeneca's *Entocort EC* prior to the expiration of the patents listed in the FDA Orange Book. Mylan claims that each of the two patents covering *Entocort EC* is either invalid or will not be infringed by its proposed ANDA product. In July 2008, AstraZeneca filed a complaint for patent infringement against Mylan in the US District Court for the District of Delaware. In August 2008, Mylan responded by alleging non-infringement and invalidity of the patents-in-suit. No trial date has been set.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting *Entocort EC*.

### **ETHYOL (AMIFOSTINE)**

In April 2008, the FDA approved Sun Pharmaceutical Industries Limited's (Sun) generic amifostine product, which Sun launched shortly thereafter. An active infringement action has been brought against Sun as it pertains to certain patents to which AstraZeneca, through its acquisition of MedImmune, has rights. There was no material change to the status of that litigation in 2008.

Settlement discussions have occurred between the parties, and the Court is scheduled to hear Sun's motion for summary judgment in February 2009. MedImmune believes that the trial of this matter will be scheduled for late 2009.

### **EXANTA (XIMELAGATRAN)**

Between January and March 2005, four putative and essentially similar securities class actions were filed in the US against AstraZeneca PLC, Håkan Mogren (who currently serves as a Director of AstraZeneca PLC), Sir Tom McKillop, Jonathan Symonds and Percy Barnevick (who are former Directors of AstraZeneca PLC). These actions were subsequently consolidated into a single action in the US District Court for the Southern District of New York. The Consolidated Amended Complaint alleged that the defendants made materially false and misleading statements regarding *Exanta* clinical trials and the status of the *Exanta* new drug application in the US. The plaintiffs purport to assert claims on behalf of purchasers of AstraZeneca publicly traded securities during the period April 2003 to September 2004 under sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5.

In an opinion dated 3 June 2008, the US District Court for the Southern District of New York dismissed the case in its entirety by granting the motions to dismiss of AstraZeneca PLC and the individual defendants. Plaintiffs are currently appealing this decision to the US Court of Appeals for the Second Circuit, except for the ruling regarding two of the four individual defendants. AstraZeneca filed its brief in response to Plaintiffs' appeal on 14 October 2008.

AstraZeneca PLC will continue to vigorously defend itself in this matter.

### **IRESSA (GEFITINIB)**

Between 2004 and 2008, seven claims were filed against AstraZeneca KK in Japan, in the Osaka and Tokyo District Courts. In six of the claims, it is alleged that *Iressa* caused a fatal incidence of interstitial lung disease (ILD) in a Japanese patient. In the seventh claim, it is alleged that *Iressa* caused a non-fatal incidence of ILD. AstraZeneca KK believes the claims are without merit and is defending all the cases. ILD is a known complication of lung disease, including advanced lung cancer, regardless of treatment.

### **LOSEC/PRILOSEC (OMEPRAZOLE)**

#### **Patent litigation – US**

In 2001, AstraZeneca filed a suit in the US against Andrx Pharmaceuticals, Inc. (Andrx) for infringement of US Patent No. 6,013,281 (the '281 patent) directed to a process for making an omeprazole formulation. Andrx filed counterclaims of non-infringement, invalidity and unenforceability for inequitable conduct during prosecution of the '281 patent. Andrx also asserted that in addition to the '281 patent, two other formulation patents, numbered 4,786,505 (the '505 patent) and 4,853,230 (the '230 patent) were unenforceable for alleged litigation misconduct by AstraZeneca. Both parties sought attorneys' fees. In May 2004, the US District Court for the Southern District of New York ruled that the '281 patent was infringed, but also ruled that the '281 patent was invalid.

The US District Court for the Southern District of New York dismissed Andrx's litigation misconduct and other counterclaims and affirmative defences, leaving intact the October 2002 decision finding the '505 and '230 patents not invalid and infringed by Andrx. The October 2002 decision was affirmed in all respects on appeal in December 2003. The Court entered final judgment regarding the '281 patent in July 2004, after determining to stay the attorneys' fees claims pending any appeals. Andrx appealed the judgment and AstraZeneca cross-appealed. The appeal was argued to the US Court of Appeals for the Federal Circuit in August 2006. In April 2007, the Federal Circuit affirmed the lower court decision that the asserted claims of the '281 patent are invalid. The Federal Circuit also concluded that AstraZeneca's '505 and '230 formulation patents remained enforceable. As a result of Andrx's infringement of the '505 and '230 patents, AstraZeneca was the prevailing party against Andrx in the lower court. AstraZeneca is pursuing appropriate relief, including damages.

During 2000 and 2001, AstraZeneca had filed suits against Lek Pharmaceutical and Chemical Company d.d. and Lek Services USA, Inc. (together Lek), Impax Laboratories Inc. (Impax), Eon Labs Manufacturing Inc. (Eon), Mylan Pharmaceuticals Inc. (Mylan), Apotex Corp. and Apotex, Inc. (together Apotex), Torpharm, Inc. (Torpharm) and Zenith Goldline Pharmaceuticals, Inc. (now known as IVAX Pharmaceuticals, Inc.) (IVAX). These suits followed the filing of ANDAs by these companies with the FDA concerning the companies' intention to market generic omeprazole products in the US. The basis for the proceedings is that the actions of all the companies infringe the '505 and '230 formulation patents relating to omeprazole. The cases are proceeding under the US Hatch-Waxman legislation. The case against IVAX was dismissed without prejudice shortly after it was filed, after IVAX withdrew its application to market generic omeprazole. During 2003, after Mylan

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

commenced commercial sale of its product, AstraZeneca filed suit against Laboratorios Esteve, SA and Esteve Quimica, SA (together Esteve), manufacturers of the omeprazole product to be distributed in the US by Mylan. In 2003 and 2004, Lek, Apotex and Impax all began commercial sales of their generic omeprazole products. In July 2004, Lek filed a motion for summary judgment of non-infringement. In January 2005, AstraZeneca filed suit against Teva Pharmaceutical Industries Ltd and Teva Pharmaceuticals USA, Inc. (together Teva), which are marketing and selling Impax's omeprazole products. The Teva case was stayed in June 2005 until liability issues in the Impax action are resolved. AstraZeneca made claims for damages against each of the selling defendants. Anti-trust and non-infringement counterclaims were filed by Andrx, Apotex, Torpharm, Impax, Eon, Mylan, Esteve, Teva and Lek. All defendants except Lek have also raised invalidity and unenforceability counterclaims. The anti-trust counterclaims, as well as AstraZeneca's claims for damages, have been stayed pending resolution of the patent liability issues. Apotex, Impax and Eon have withdrawn their anti-trust counterclaims.

In January 2006, AstraZeneca withdrew its claims for damages against Impax, and as a result the Court dismissed Impax's demand for a jury. Impax appealed this decision on an interlocutory basis to the US Court of Appeals for the Federal Circuit, which denied the appeal, and then to the US Supreme Court, which also denied the appeal. From April to June 2006, a consolidated bench trial on patent liability issues was conducted, involving the remaining defendants, Mylan, Esteve, Lek, Apotex and Impax. Post-trial briefing was completed in July 2006.

In May 2007, the US District Court for the Southern District of New York upheld both formulation patents covering *Priosec*. The Court found that the generic omeprazole formulations of Impax and Apotex infringed AstraZeneca's patents. The Court also found that the generic products sold by Lek, Mylan and Esteve did not infringe AstraZeneca's patents. AstraZeneca appealed the Mylan/Esteve decision to the US Court of Appeals for the Federal Circuit. Impax and Apotex also appealed. In May 2008, all three appeals were argued before the Federal Circuit. In June 2008, the Federal Circuit upheld the ruling that Mylan/Esteve did not infringe. In September 2008, the Federal Circuit upheld that the generic omeprazole formulations of Impax and Apotex infringed AstraZeneca's patents-in-suit. AstraZeneca will pursue damages and additional remedies from Apotex, Impax and Teva, who is marketing Impax's product.

In June 2007, AstraZeneca received a notice from Dr. Reddy's Laboratories, Ltd and from Dr. Reddy's Laboratories, Inc. (together Dr Reddy's) that Dr. Reddy's had submitted an ANDA seeking FDA approval to market a 20mg delayed release omeprazole magnesium capsule for the OTC market. Dr. Reddy's seeks approval to market a generic omeprazole OTC product before the expiration of the patents listed in the FDA Orange Book in reference to the *Priosec* OTC product that is marketed by Procter & Gamble. In July 2007, AstraZeneca commenced patent infringement litigation in the US District Court for the Southern District of New York against Dr. Reddy's in response to Dr. Reddy's Paragraph IV Certification regarding *Priosec* OTC. In July 2008, Dr. Reddy's filed a motion for summary judgment of non-infringement. The Court has not ruled on this motion. No trial date has been set.

### Patent litigation – France

In June and July 2004, AstraZeneca applied in France for injunctions based on its omeprazole formulation patent against six companies for marketing generic omeprazole. In August 2004, the applications were rejected at first instance. AstraZeneca appealed this decision and in March 2005 the applications were rejected on appeal. In May 2004, AstraZeneca also started legal proceedings against the same companies for infringement of its omeprazole formulation patent in France. These proceedings have been consolidated with a case challenging the validity of the patent, brought by one of the companies against AstraZeneca. These cases have been closed due to inactivity by both parties over the last two years.

### Patent litigation – Canada

AstraZeneca continues to be involved in proceedings in Canada involving various patents relating to omeprazole capsules or omeprazole magnesium tablets. Apotex launched a generic omeprazole capsule product in Canada in January 2004.

In February 2006, the Federal Court of Appeal upheld a lower court decision that prohibited Apotex from obtaining a Notice of Compliance for omeprazole magnesium tablets until the expiry of a relevant formulation patent in December 2008. In December 2008, the Federal Court of Appeal dismissed Apotex's appeal of an order dismissing a motion by Apotex to set aside a Prohibition Order.

In January 2006, AstraZeneca Canada Inc. was served with a claim in the Federal Court of Canada for payment of an undetermined sum based on damages allegedly suffered by Apotex due to the delay from January 2002 to January 2004 in the issuance to Apotex of a Notice of Compliance in Canada for its 20mg omeprazole capsule product. AstraZeneca believes the claim is without merit and is defending it, as well as continuing to vigorously pursue its already pending patent infringement action against Apotex.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting *Losec/Priosec*.

### European Commission investigation

In February 2000, the European Commission commenced an investigation relating to certain omeprazole intellectual property rights, and associated regulatory and patent infringement litigation. The investigation is pursuant to Article 82 of the EC Treaty, which prohibits an abuse of a dominant position. The investigation was precipitated by a complaint regarding a number of patent and other proceedings involving AstraZeneca. AstraZeneca has, in accordance with its corporate policy, co-operated with the Commission. In July 2003, the Commission served a Statement of Objections on AstraZeneca, referring to alleged infringements regarding the obtaining of supplementary protection certificates for omeprazole in certain European countries; and regarding AstraZeneca's replacement of omeprazole capsules by omeprazole MUPS (tablets) and withdrawal of capsule marketing authorisations in three European countries. AstraZeneca replied fully to the Commission, explaining why its actions were, in AstraZeneca's view, lawful. An oral hearing took place in February 2004. In June 2005, the Commission notified AstraZeneca PLC and AstraZeneca AB of its Decision to impose fines totalling €60m on the companies for infringement of European

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

competition law (Article 82 of the EC Treaty and Article 54 of the EEA Agreement). The Commission alleges that the companies abused their dominant positions in the periods between 1993 and 2000 by making a pattern of misleading representations before the patent offices and/or courts in Belgium, Denmark, Germany, The Netherlands, Norway and the UK in regard to obtaining supplementary protection certificates for omeprazole; and by requesting the surrender of market authorisations for omeprazole capsules in Denmark, Norway and Sweden, combined with withdrawal of omeprazole capsules from these countries and the launch of omeprazole MUPS (tablets). AstraZeneca does not accept the Commission's Decision and has appealed it to the Court of First Instance. AstraZeneca denies that it had a dominant position or that it was engaged in the behaviours as characterised by the Commission. In the meantime, the fine was fully provided for in the half-year results in 2005 through a charge to operating profit of \$75m. Because it is further alleged by the Commission that these activities had the effect of hindering the entry of the generic version of *Losec* and parallel trade, it is possible that third parties could seek damages for alleged losses arising from this matter. Any such claims would be vigorously resisted.

The Oral Hearing in the above appeal to the Court of First Instance took place on 26 and 27 November 2008. The Court indicated its intention to hand down judgment in Spring 2009.

### **NEXIUM (ESOMEPRAZOLE MAGNESIUM)**

#### **Sales and marketing practices**

AstraZeneca entities have been sued in various state and federal courts in the US in purported representative class actions involving the marketing of *Nexium*. These actions generally allege that AstraZeneca's promotion and advertising of *Nexium* to physicians and consumers was unfair, unlawful and deceptive, particularly as the promotion relates to comparisons of *Nexium* with *Prilosec*. They also allege that AstraZeneca's conduct relating to the pricing of *Nexium* was unfair, unlawful and deceptive. The plaintiffs allege claims under various state consumer protection, unfair practices and false advertising laws. The plaintiffs in these cases seek remedies that include restitution, disgorgement of profits, damages, punitive damages, injunctive relief, attorneys' fees and costs of suit.

The first action was brought in 2004 in the Superior Court of the State of California for the County of Los Angeles by the AFL-CIO, two unincorporated associations, and an individual on behalf of themselves, the general public and a class of California consumers, third party payers, cash payers and those making a co-payment. A second action was filed in the same court on behalf of a similar putative class of consumers. Actions making substantially similar allegations were filed in 2004 and 2005 on behalf of putative classes of consumers, third party payers, purchasers and labour management trust funds in the Circuit Court of Searcy County, Arkansas; in the Superior Court of the State of Delaware in and for New Castle County; in the Superior Court of Massachusetts in Boston; in the US District Court for the District of Delaware (three consolidated cases); and in the Circuit Court of the 11th Judicial Court in and for Miami-Dade County, Florida.

In September 2005, the Court in California issued a ruling on AstraZeneca's demurrer and motion to strike in the two California actions. The Court granted AstraZeneca's motion with respect to the associated plaintiffs and denied the motion with respect to the individual plaintiffs, allowing the cases of the individuals to proceed. In October 2005, the Court in Massachusetts denied AstraZeneca's motion to dismiss. Plaintiffs' motions for class certification in the California and Massachusetts cases were filed in October 2007. The California plaintiffs filed an amended class certification motion in January 2008. In June 2008, AstraZeneca filed oppositions to the class certification motions, and also filed motions for summary judgment in California. Oral argument on the California motions was held in December 2008 and a decision is expected by the second quarter of 2009.

In November 2005, the US District Court for the District of Delaware granted AstraZeneca's motion to dismiss the consolidated class action complaint. In September 2007, the US Court of Appeals for the Third Circuit affirmed the dismissal and denied plaintiffs' petition for rehearing *en banc*. In December 2007, plaintiffs filed a petition for *writ a certiorari* with the US Supreme Court. AstraZeneca responded to the petition in February 2008. The petition is pending. The Delaware state case has been stayed pending the outcome of the Delaware federal cases.

In May 2006, the Arkansas State Court granted AstraZeneca's motion to dismiss the plaintiffs' complaint. The plaintiffs filed additional motions and pleadings, including an amended complaint. AstraZeneca filed a motion to dismiss the amended complaint. In July 2008, the Arkansas State Court granted AstraZeneca's renewed motion to dismiss the plaintiffs' amended complaint. The plaintiffs filed an appeal.

#### **Anti-trust**

In December 2006 and January 2007, several lawsuits against AstraZeneca entities, including putative class actions, were filed in the US District Court for the District of Columbia alleging anti-trust claims of unlawful monopolisation relating to *Prilosec* and *Nexium*. Individual actions were filed in December 2006 by Walgreen Co., Eckerd Corporation, Maxi Drug, Inc. d/b/a Brooks Pharmacy, The Kroger Co., New Albertson's Inc., Safeway, Inc., Hy-Vee, Inc., American Sales Company, Inc., Rite Aid Corporation, and Rite Aid Headquarters Corp. Also, putative class actions brought on behalf of direct purchasers were filed in December 2006 by Meijer, Inc., Meijer Distribution, Inc., Louisiana Wholesale Drug Co., Inc., and in January 2007 by Burlington Drug Co., Inc., Dik Drug Co., Inc, and King Drug Co. of Florence, Inc. The plaintiffs sought treble damages, injunctive relief and attorney fees. All plaintiffs filed amended complaints in February 2007. In February 2008, the court dismissed all complaints. The plaintiffs did not appeal the decision.

#### **Patent proceedings**

In October 2007, the European Patent Office (EPO) Opposition Division ruled that the European process patent EPB 0,773,940 (the '940 patent) for *Nexium* is valid in amended form, despite an opposition by the German generic manufacturer, ratiopharm. The patent has been upheld as granted except, with respect to certain claims, for minor amendments. In January 2008, ratiopharm and AstraZeneca filed notices of appeal against this decision.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

The '940 patent for *Nexium* covers a process for the manufacturing of esomeprazole and its salts in Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, UK, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, The Netherlands, Portugal, Slovenia and Sweden. This positive decision by the EPO means that this patent, in its amended form, still covers the manufacturing process for *Nexium*. This patent expires in 2015.

This portfolio includes additional patents with expiration dates ranging from 2009 to 2018. In addition to these patents, *Nexium* has data exclusivity valid until March 2010 in most major European markets.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property rights protecting *Nexium*.

### Patent litigation

In October 2005, AstraZeneca received a Paragraph IV Certification notice-letter from Ranbaxy Pharmaceuticals, Inc. that Ranbaxy Laboratories Limited (together Ranbaxy) had submitted an ANDA to the FDA for 20mg and 40mg esomeprazole magnesium delayed-release capsules. The ANDA alleged invalidity and/or non-infringement in respect of certain AstraZeneca US patents listed in the FDA Orange Book with reference to *Nexium*. In November 2005, AstraZeneca commenced wilful patent infringement litigation in the US District Court for the District of New Jersey against Ranbaxy and its affiliates in response to Ranbaxy's Paragraph IV Certifications regarding *Nexium*. In April 2008, AstraZeneca entered into a settlement agreement and consent judgment with Ranbaxy. Ranbaxy was the first to file an ANDA having a Paragraph IV Certification notice in respect of the FDA Orange Book-listed *Nexium* patents. Ranbaxy conceded that all six patents asserted by AstraZeneca in the patent litigation are valid and enforceable. Ranbaxy also conceded that four of the patents would be infringed by the unlicensed sale of Ranbaxy's proposed generic product. The settlement agreement allows Ranbaxy to commence sales of a generic version of *Nexium* under a license from AstraZeneca on 27 May 2014.

In January 2006, AstraZeneca received a Paragraph IV Certification notice-letter from IVAX Pharmaceuticals Inc. that IVAX Corporation (together IVAX) had submitted an ANDA to the FDA for 20mg and 40mg esomeprazole magnesium delayed-release capsules. The ANDA contained Paragraph IV Certifications of invalidity and/or non-infringement in respect of certain AstraZeneca US patents listed in the FDA Orange Book with reference to *Nexium*. In March 2006, AstraZeneca commenced wilful patent infringement litigation in the US District Court for the District of New Jersey against IVAX, its parent Teva Pharmaceuticals, and their affiliates. In December 2008, the Court granted AstraZeneca's motion to add Cipla, Ltd. as a defendant in the litigation. No trial date has been set.

In August 2006, AstraZeneca received a Paragraph IV Certification notice-letter from Dr Reddy's Laboratories Inc. and Dr Reddy's Laboratories Limited (together Dr Reddy's) that Dr Reddy's had submitted an ANDA to the FDA for 20mg and 40mg esomeprazole magnesium delayed-release capsules. Dr Reddy's August 2006 notice did not challenge three FDA Orange Book-listed patents claiming esomeprazole magnesium (US Patent Nos. 5,714,504, 5,877,192 and 6,875,872). In December 2007, AstraZeneca received another Paragraph IV Certification notice-letter from Dr. Reddy's that Dr. Reddy's had submitted an ANDA to the FDA for 20mg and 40mg esomeprazole magnesium delayed-release capsules. Unlike the August 2006 notice, Dr. Reddy's December 2007 notice alleged that US Patent Nos. 5,714,504, 5,877,192 and 6,875,872 were invalid or not infringed. AstraZeneca's exclusivity relating to these three patents expires on 3 August 2015, 27 November 2014 and 27 November 2014, respectively. In January 2008, AstraZeneca commenced patent infringement litigation in the US District Court for the District of New Jersey against Dr. Reddy's. No trial date has been set.

In July and September 2007, AstraZeneca received a Paragraph IV Certification notice-letter from Matrix Laboratories, Inc. (Matrix) that Matrix had submitted an ANDA to the FDA for 20mg and 40mg esomeprazole magnesium delayed-release capsules. Matrix was seeking FDA approval to market a generic esomeprazole magnesium product prior to the expiration of some but not all of the patents listed in the FDA Orange Book with reference to *Nexium*. Matrix's notice did not challenge three FDA Orange Book-listed patents claiming esomeprazole magnesium (US Patent Nos. 5,714,504, 5,877,192 and 6,875,872). As AstraZeneca has not received notice from Matrix as to these three US patents, Matrix cannot market generic esomeprazole magnesium until the end of the exclusivity afforded by these patents. AstraZeneca did not bring a lawsuit. AstraZeneca reserves the right to enforce all patents related to *Nexium*, including those listed in the FDA Orange Book.

In March 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Teva Parental Medicines (Teva) that Teva had submitted a new drug application (NDA) to the FDA regarding esomeprazole for injection, 20mg/vial and 40mg/vial. The notice contains certifications of invalidity, unenforceability, and/or non-infringement in respect of US Patent No. 5,877,192, which is listed in the FDA Orange Book with reference to *Nexium* in intravenous form. In April 2008, AstraZeneca commenced patent infringement litigation against Teva in the US District Court for the District of New Jersey. In October 2008, Teva informed AstraZeneca that Teva was withdrawing its NDA relating to esomeprazole for injection. As a result of Teva withdrawing its NDA, the Court has dismissed the litigation.

In May and June 2008, AstraZeneca received a complaint from IVAX and a complaint from Dr. Reddy's for declaratory judgments of non-infringement and/or invalidity for patents listed in the FDA Orange Book with reference to *Nexium* that were not previously at issue in the ongoing infringement litigations. In August 2008, the Court dismissed the IVAX and Dr. Reddy's declaratory judgment actions as to certain patents and stayed the declaratory judgment actions as to remaining patents at issue. In January 2009, the Court vacated its August 2008 Orders, which had dismissed and stayed the declaratory judgment actions. As a result, the IVAX and Dr. Reddy's declaratory judgment actions are proceeding. No trial date has been set.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

In August 2008, AstraZeneca received a Paragraph IV Certification notice-letter from IVAX challenging US Patent No. 7,411,070 (the '070 patent). The '070 patent is listed in the FDA Orange Book with reference to *Nexium*. The notice contains certifications of invalidity, unenforceability and/or non-infringement in respect of the '070 patent. In October 2008, AstraZeneca commenced patent infringement litigation asserting the '070 patent against IVAX and Cipla Limited in the US District Court, District of New Jersey. No trial date has been set.

In December 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Sandoz, Inc. (Sandoz) that Sandoz had submitted an ANDA to the FDA for esomeprazole magnesium delayed-release capsules, 20mg and 40mg. The ANDA alleged invalidity and/or non-infringement in respect of certain AstraZeneca US patents listed in the FDA Orange Book with reference to *Nexium*. In January 2009, AstraZeneca commenced patent infringement litigation in the US District Court for the District of New Jersey against Sandoz in response to Sandoz's Paragraph IV Certifications regarding *Nexium*. No trial date has been set.

In Canada, AstraZeneca Canada Inc. received several notices of allegation from Apotex Inc. (Apotex) in late 2007 in respect of patents listed on the Patent Register in Canada for *Nexium*. Apotex has asserted in its notices that it has filed an Abbreviated New Drug Submission for 20mg and 40mg esomeprazole magnesium trihydrate tablets and alleges non-infringement and/or invalidity of numerous patents. AstraZeneca responded by commencing seven court applications in January 2008 under the Patented Medicines (Notice of Compliance) Regulations. In January 2008, Apotex advised that its product was erroneously described as being a trihydrate in its recent allegations, which Apotex asserted it was withdrawing. Apotex made replacement allegations in January 2008, some of which AstraZeneca is continuing to challenge in Court applications commenced in March 2008 under the Patented Medicines (Notice of Compliance) Regulations. Apotex cannot obtain a Notice of Compliance (marketing approval) for its esomeprazole tablets until the earlier of the disposition of all of the court applications in Apotex's favour or, unless a Prohibition Order is granted, 24 months from the date on which the latest court application has been commenced.

In Norway, AstraZeneca received a writ from Hexal AG, Sandoz AS (Norway) and Sandoz A/S (Denmark) (together Hexal) claiming that AstraZeneca's Norwegian patents No. 314,125 and No. 307,378, which relate to *Nexium*, are invalid. In a reply filed with the Oslo District Court in September 2008, AstraZeneca stated that it contests Hexal's claims. AstraZeneca filed a request with the Norwegian Patent Office to amend Norwegian patent No. 314,125 and also requested that the Court stay the invalidity case pending determination of the patent amendment request. In October 2008, Hexal consented to AstraZeneca's request to stay the invalidity case until the patent amendment request had been determined.

In Finland, AstraZeneca filed for declaratory relief against Sandoz A/S and Sandoz Oy (Finland) (together Sandoz) in July 2008 in respect of Finnish Patent No. 117,755 (the '755 patent), which relates to *Nexium*. AstraZeneca has requested that the Finnish Court declare that Sandoz would infringe the '755 patent if they were to launch a generic esomeprazole product prior to expiry of the term of the '755 patent. Sandoz filed a written response in November 2008 and requested, *inter alia*, that this proceeding be stayed. In September 2008, Sandoz and Hexal brought an invalidity action concerning the '755 patent before the District Court of Helsinki. AstraZeneca filed a written response to the invalidity action in December 2008. No trial date has been set for either of these two Finnish Court proceedings.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting *Nexium*.

### Federal Trade Commission (FTC) inquiry

In July 2008, AstraZeneca received a Civil Investigative Demand from the Federal Trade Commission seeking information regarding the *Nexium* patent litigation settlement with Ranbaxy. AstraZeneca is co-operating fully with the request.

### PULMICORT RESPULES (BUDESONIDE INHALATION SUSPENSION)

On 25 November 2008, AstraZeneca entered into a settlement agreement in its *Pulmicort Respules* patent infringement litigation against IVAX Pharmaceuticals, Inc., a wholly owned subsidiary of Teva Pharmaceuticals USA Inc. (Teva).

The agreement settles the patent infringement litigation filed by AstraZeneca following Teva's submission to the FDA of an ANDA for a generic version of *Pulmicort Respules*. Under the settlement agreement, Teva concedes that the patents asserted by AstraZeneca in the patent litigation are valid and enforceable. Teva also concedes that its generic version of *Pulmicort Respules* infringes AstraZeneca's patents.

The settlement agreement will allow Teva to commence sales of budesonide inhalation suspension, a generic version of *Pulmicort Respules*, under an exclusive licence from AstraZeneca beginning 15 December 2009. AstraZeneca will receive a significant royalty on sales of Teva's product, with a marked step down in payments if additional at-risk generic products enter the market place. Teva also agrees to pay AstraZeneca a sum in respect of damages resulting from the unauthorised launch of its generic budesonide inhalation suspension product in November 2008. The agreement releases Teva from all past US sales of its generic budesonide inhalation suspension and provides that any product already shipped by Teva will remain in the market to be further distributed and dispensed.

In March 2008, AstraZeneca filed a lawsuit in the US District Court for the District of New Jersey against Breath Ltd. (Breath) for patent infringement. The lawsuit is the result of an ANDA filed by Breath with the FDA concerning Breath's intent to market a generic version of AstraZeneca's *Pulmicort Respules* in the US prior to the expiration of AstraZeneca's patents. The basis for AstraZeneca's complaint is that the action by Breath of filing an ANDA infringes certain of AstraZeneca's patents directed to *Pulmicort Respules* and their use. In May 2008, Breath responded and filed counterclaims alleging non-infringement and invalidity. Discovery in the litigation is ongoing.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting *Pulmicort Respules*.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

### **SEROQUEL (QUETIAPINE FUMARATE)**

#### **Product liability**

In August 2003, Susan Zehel-Miller filed a putative class action against AstraZeneca PLC and AstraZeneca Pharmaceuticals LP on behalf of 'all persons in the US who purchased and/or used *Seroquel*'. Among other things, the class action alleged that AstraZeneca failed to provide adequate warnings in connection with an alleged association between *Seroquel* and the onset of diabetes. In 2004, the US District Court for the Middle District of Florida denied class certification and the case was ultimately dismissed. Two additional putative class actions raising similar allegations have likewise been dismissed. There are no other US class actions relating to *Seroquel*; however, four putative class actions raising substantially similar allegations have been filed in Canada.

AstraZeneca Pharmaceuticals LP, either alone or in conjunction with one or more affiliates, has been sued in numerous individual personal injury actions involving *Seroquel*. In most of these cases, the nature of the plaintiffs' alleged injuries is not clear from the complaint and, in most cases, little or no factual information regarding the alleged injury has been provided in the complaint. However, the plaintiffs generally contend that they developed diabetes and/or other related injuries as a result of taking *Seroquel* and/or other atypical anti-psychotic medications.

As of 5 January 2009, AstraZeneca was defending approximately 9,210 served or answered lawsuits involving approximately 15,461 plaintiff groups. To date, approximately 2,363 additional cases have been dismissed by order or agreement and approximately 1,500 of those cases have been dismissed with prejudice. Approximately 60% of the plaintiffs' currently pending *Seroquel* claims are in state courts (primarily Delaware, New Jersey, New York and Missouri) with the other 40% pending in the federal court, where most of the cases have been consolidated for pre-trial purposes into a Multi-District Litigation (MDL). Approximately 24% of the cases that were or are pending in the federal court MDL have been dismissed.

Plaintiffs' discovery of AstraZeneca has largely been completed, although additional discovery may take place. AstraZeneca's discovery of specific plaintiffs' cases is ongoing in most jurisdictions and AstraZeneca intends to vigorously test the merits of those individual cases on factual and legal grounds. Bellwether case systems have been implemented by the courts in Delaware, New Jersey and the federal MDL court due to the larger volume of consolidated cases in those jurisdictions.

On 28 January 2009, the federal judge presiding over the *Seroquel* MDL in the District Court for the Middle District of Florida orally informed the parties that she was granting AstraZeneca's motions for summary judgment in the first two *Seroquel* product liability cases set for trial. Therefore, the trial scheduled for 2 February 2009 in Florida has been cancelled.

AstraZeneca expects that an additional seven to nine trials may be scheduled to commence in 2009. AstraZeneca is also aware of approximately 59 additional cases that have been filed but not yet served and has not determined how many additional cases, if any, may have been filed. Some of the cases also include claims against other pharmaceutical manufacturers such as Eli Lilly & Co., Janssen Pharmaceutica, Inc. and/or Bristol-Myers Squibb Company. AstraZeneca intends to litigate these cases on their individual merits and will defend against the cases vigorously.

As of 31 December 2008, legal defence costs of approximately \$512m have been incurred (of which approximately \$335m was incurred during 2008). AstraZeneca has product liability insurance that is considered to respond to the vast majority of claims brought in these *Seroquel* cases, subject to a retention. This insurance provides coverage for legal defence costs and potential damage amounts in connection with the *Seroquel* product liability cases. AstraZeneca has recorded an insurance receivable of \$426m at 31 December 2008 (2007: \$139m). AstraZeneca currently estimates that its defence costs alone may exceed its insurance coverage with respect to the *Seroquel* cases.

#### **Patent litigation – *Seroquel***

In September 2005, AstraZeneca received a notice from Teva Pharmaceuticals USA Inc. (Teva) that Teva had submitted an ANDA for quetiapine fumarate 25mg tablets containing a Paragraph IV Certification alleging invalidity, unenforceability or non-infringement in respect of AstraZeneca's US patent listed in the FDA Orange Book with reference to *Seroquel*. In November 2005, AstraZeneca filed a lawsuit directed to Teva's 25mg tablets ANDA in the US District Court for the District of New Jersey for wilful patent infringement.

In February 2006, AstraZeneca received another notice from Teva that it had amended its previously submitted ANDA for quetiapine fumarate 25mg tablets and added 100mg, 200mg and 300mg tablets to its application to the FDA. The amended ANDA submission contained a similar Paragraph IV Certification alleging invalidity, unenforceability or non-infringement in respect of AstraZeneca's US patent listed in the FDA Orange Book with reference to *Seroquel*. In March 2006, in response to Teva's amended ANDA and Teva's intent to market additional strengths of a generic version of *Seroquel* in the US prior to the expiration of AstraZeneca's patent, AstraZeneca filed an additional lawsuit against Teva in the US District Court for the District of New Jersey for patent infringement.

The two Teva lawsuits were consolidated in April 2006. However, in March 2006, the US District Court had granted Teva's motion to strike AstraZeneca's added allegation of wilfulness in its patent infringement claim in the first complaint directed to Teva's 25mg tablets. Therefore, in the consolidated action, in response to AstraZeneca's now combined allegations of patent infringement directed to Teva's 25mg, 100mg, 200mg and 300mg tablets ANDA, Teva alleges non-infringement and patent invalidity. In January 2007, Teva filed a motion seeking leave to amend its pleadings in the consolidated action to add allegations, defences and counter-claims directed to alleged inequitable conduct in the procurement of AstraZeneca's patent.

In March 2007, AstraZeneca received a Paragraph IV Certification notice-letter from another generic drug manufacturer, Sandoz Inc. (Sandoz), notifying AstraZeneca that it had submitted an ANDA to the FDA for approval to market a generic version of AstraZeneca's 25mg quetiapine

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

fumarate tablets prior to the expiration of AstraZeneca's listed patent. Sandoz's notice-letter alleged non-infringement and patent invalidity. In April 2007, AstraZeneca filed a lawsuit in the US District Court for the District of New Jersey against Sandoz alleging patent infringement.

In June 2007, AstraZeneca received a third notice from Teva notifying AstraZeneca that it had supplemented its ANDA for quetiapine fumarate tablets again, adding 50mg, 150mg and 400mg tablets to the application. The third notice-letter similarly advised that Teva's supplementation contained a Paragraph IV Certification respecting AstraZeneca's listed patent covering Seroquel. In June 2007, AstraZeneca filed a third lawsuit in the US District Court for the District of New Jersey against Teva for its supplementation adding the 50mg, 150mg and 400mg dosage strengths.

In October 2007, the Court granted AstraZeneca's partial summary judgment motion based on collateral estoppel, which precludes Teva from re-litigating issues previously resolved against it in another previous patent litigation involving Eli Lilly & Co.'s anti-psychotic drug, Zyprexa™.

After completion of fact-discovery, Sandoz and Teva conceded that their respective ANDA products infringe AstraZeneca's patent covering Seroquel. Sandoz and Teva also conceded the patent's validity, leaving only allegations of unenforceability for inequitable conduct. In March 2008, AstraZeneca filed a motion for summary judgment of no inequitable conduct.

In July 2008, the US District Court, District of New Jersey granted AstraZeneca's motion for summary judgment of no inequitable conduct. Therefore, on 9 July 2008, the Court entered its Final Judgment in AstraZeneca's favour on all claims and defences in respect of infringement, validity, and enforceability of AstraZeneca's patent. The Court's judgment includes an order to the FDA that any approvals of Teva's or Sandoz's ANDAs shall be after the date that is the later of the expiration date of US Patent No. 4,879,288 (the '288 patent) or the expiration date of any additional exclusivity to which AstraZeneca is or becomes entitled.

Teva and Sandoz appealed the judgment to the Federal Circuit Court of Appeals. In December 2008, the parties completed briefing. Oral argument is scheduled for 6 March 2009. In December 2008, Teva announced that the FDA had tentatively approved its generic quetiapine tablets.

### Patent litigation – Seroquel XR

AstraZeneca lists two patents in the FDA Orange Book referencing Seroquel XR: the '288 patent covering quetiapine fumarate, the active ingredient, and US Patent No. 5,948,437 (the '437 patent) covering extended-release formulations, processes and methods in respect of quetiapine fumarate.

In July 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Handa Pharmaceuticals, LLC (Handa) stating that it had submitted an ANDA seeking approval to market generic versions of 200mg and 300mg Seroquel XR tablets before the expiration of AstraZeneca's two listed patents covering Seroquel XR. Handa's Certification notice-letter alleged non-infringement, invalidity and unenforceability. Later in July 2008, AstraZeneca received a similar Paragraph IV Certification notice-letter from Handa stating that it had submitted an amendment to its ANDA for 200mg and 300mg tablets adding a request for approval to market a generic version of 400mg Seroquel XR tablets before the expiration of AstraZeneca's two listed patents covering Seroquel XR.

In July 2008, AstraZeneca filed a lawsuit in US District Court, District of New Jersey, against Handa and a currently unknown, associated entity alleging infringement of AstraZeneca's '288 and '437 patents covering Seroquel XR 200mg, 300mg and 400mg tablets. The filing of this lawsuit triggered 30-month stays of FDA final approval for Handa's ANDA products.

In September 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Accord Healthcare Inc. (Accord) advising that it had submitted an ANDA seeking approval to market generic versions of 200mg, 300mg and 400mg Seroquel XR tablets before expiration of AstraZeneca's patent covering the Seroquel XR formulation. Accord is a subsidiary of Intas Pharmaceutical Limited (Intas). Later in September 2008, AstraZeneca filed a lawsuit in US District Court, District of New Jersey, against Accord, Intas and related entities, alleging infringement of the '437 patent. The filing of this lawsuit triggered a 30-month stay of FDA final approval for Accord's ANDA products.

In October and November 2008, AstraZeneca received respectively a third and fourth Paragraph IV Certification notice-letter from Handa advising that it had submitted an ANDA seeking approval to market generic versions of 50mg and 150mg Seroquel XR tablets before expiration of AstraZeneca's patents covering the product. In October 2008, AstraZeneca filed a second lawsuit in US District Court, District of New Jersey against Handa alleging infringement of AstraZeneca's patents covering the active ingredient and formulation of Seroquel XR 50mg tablets; and in December 2008, AstraZeneca filed a third lawsuit against Handa alleging infringement of AstraZeneca's patents covering the active ingredient and formulation of Seroquel XR 150mg tablets. The filing of these additional lawsuits triggered 30-month stays of FDA final approval for Handa's 50mg and 150mg ANDA products.

For purposes of discovery, the three Handa actions and the Accord action have been consolidated under a common scheduling order. The consolidated matter proceeds.

In December 2008, AstraZeneca received a Paragraph IV Certification notice-letter from Biovail Laboratories International SRL (Biovail) stating that it had submitted an ANDA seeking approval to market generic versions of 200mg, 300mg and 400mg Seroquel XR tablets before the expiration of AstraZeneca's two listed patents covering Seroquel XR. Biovail's Certification notice-letter alleged non-infringement and invalidity in respect of AstraZeneca's patents. In January 2009, AstraZeneca filed a lawsuit in US District Court, District of New Jersey, against Biovail alleging infringement of AstraZeneca's '288 and '437 patents covering Seroquel XR 200mg, 300mg and 400mg tablets. The filing of this lawsuit triggered a 30-month stay of FDA final approval for Biovail's ANDA products.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

On 26 January 2009, AstraZeneca received a second Paragraph IV Certification notice-letter from Accord stating that it had submitted an ANDA seeking approval to market a generic version of 150mg Seroquel XR tablets before the expiration of AstraZeneca's patent covering the Seroquel XR formulation. Accord's Certification notice-letter alleged non-infringement and invalidity in respect of AstraZeneca's patents.

AstraZeneca has full confidence in, and will vigorously defend and enforce, its intellectual property protecting Seroquel and Seroquel XR.

### Sales and marketing practices

The US Attorney's Office in Philadelphia is directing an investigation relating to Seroquel involving a review of sales and marketing practices, including allegations that AstraZeneca promoted Seroquel for non-indicated (off-label) uses. AstraZeneca understands that this investigation is the subject of a sealed *qui tam* lawsuit filed under the False Claims Act. A second investigation may relate to selected physicians who participated in clinical trials involving Seroquel. There are also a number of additional active investigations involving Seroquel sales and marketing practices led by state Attorneys General which include investigations relating to Seroquel off-label issues. Approximately 34 states are participating in a joint investigation and several states may also have individual investigations. It is not possible to predict the outcome of any of these investigations, which could include the payment of damages and the imposition of fines, penalties and administrative remedies.

In February 2007, the Commonwealth of Pennsylvania filed suit against AstraZeneca, Eli Lilly & Co. (Lilly), and Janssen Pharmaceutica Inc. (Janssen) claiming damages incurred by the Commonwealth as a result of alleged off-label promotion of atypical anti-psychotics by the three manufacturers. The lawsuit is filed in state court in Philadelphia and seeks to recover the cost to the Pennsylvania Medicaid programme and other state-funded health insurance programmes for prescriptions written as a result of the alleged off-label promotion and also seeks compensation for costs incurred by the State for the treatment of Medicaid and other public assistance beneficiaries who allegedly developed diabetes, hyperglycemia and other conditions as a result of using Seroquel without adequate warning. In December 2007, the Court granted the defendants' motion to sever the claims against AstraZeneca and Janssen from those against Lilly and directed the Commonwealth to file separate complaints against the two severed defendants, which the Commonwealth did in January 2008. In December 2008, the Court granted AstraZeneca's motion to dismiss all but two counts of the Complaint including dismissal of the Commonwealth's claims alleging violations of the Pennsylvania Medicaid False Claims Act. Similar lawsuits were filed by the State of Montana in February 2008, the State of Arkansas in May 2008, and the State of South Carolina in January 2009. AstraZeneca believes these claims to be without merit and intends to vigorously defend against them. As of the date of this announcement, the Montana action has not been served.

In May 2007, the New Jersey Ironworkers Local Union No. 68 filed a class action suit against AstraZeneca on behalf of all individuals and non-governmental entities that paid for Seroquel from January 2000 to date. The lawsuit was filed in the federal District Court in New Jersey and alleged that AstraZeneca promoted Seroquel for off-label uses and misled class members into believing that Seroquel was superior to other, lower-cost alternative medicines. Two similar class action lawsuits were filed in June and July 2007 in the New Jersey and Pennsylvania federal courts. In December 2007, the three lawsuits were transferred to the Middle District of Florida by the US Judicial Panel on Multi-District Litigation (MDL). In November 2008, the MDL Court granted AstraZeneca's motion and dismissed these cases in their entirety with prejudice. The plaintiffs filed a Notice of Appeal in December 2008. AstraZeneca intends to vigorously defend against the appeal, which it expects will be heard by the Eleventh Circuit Court of Appeals some time in 2009.

In September 2008, the Pennsylvania Employees Benefit Trust Fund (PEBTF) served AstraZeneca Pharmaceuticals LP with a complaint filed in the Pennsylvania Court of Common Pleas of Philadelphia County seeking economic damages stemming from allegedly improper marketing practices that caused the PEBTF to reimburse for allegedly overpriced Seroquel prescription and the medical care of Fund members allegedly injured from Seroquel use. In October 2008, AstraZeneca removed this lawsuit to federal court and immediately requested that it be transferred to the Seroquel MDL. The decision regarding transfer is pending. AstraZeneca intends to vigorously defend itself against this lawsuit.

In addition, there have been congressional inquiries regarding Seroquel as discussed below.

### SYMBICORT (BUDESONIDE/FORMOTEROL)

In May 2008, following an appeal by the generic manufacturers Norton Healthcare (Norton) and Generics UK, the European Patent Office (EPO) Technical Board of Appeal revoked the European patent EPB 1,014,993 covering the use of Symbicort for the treatment of chronic obstructive pulmonary disease (COPD). The stays granted in the revocation proceedings instituted by IVAX Pharmaceuticals (UK) Limited (IVAX) in the UK and Ireland with respect to the national parts of the Symbicort combination patent EPB 613,371 and EPB 1,014,993 will remain in place until IVAX applies to the Court to lift these stays in light of the EPO decisions.

In December 2008, following an opposition by Norton, the EPO Opposition Division revoked the European patent EPB 1,210,943 covering the use of Symbicort, with a specific ratio of the active ingredients and a specific particle size, for the treatment of COPD.

In June 2008, the US Patent and Trademark Office issued a final determination that US Patent No. 5,674,860 was not eligible for patent term extension. AstraZeneca filed a request for reconsideration.

AstraZeneca will vigorously defend and enforce its remaining intellectual property portfolio protecting Symbicort, which has patent expiry dates up to 2019 in Europe.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

### **SYNAGIS (PALIVIZUMAB)**

MedImmune settled its patent litigation in June 2008 with Genentech and the City of Hope in respect of the Cabilly patent (US Patent No. 6,331,415). Under the terms of the settlement agreement, the litigation, which was pending before the US District Court for the Central District of California, was fully resolved and dismissed. The settlement resolved disputed issues with respect to *Synagis* as well as a related product, motavizumab, for which regulatory approval is being sought. The settlement also permits MedImmune to obtain licences for certain additional pipeline products under the Cabilly patent family. MedImmune filed its original complaint in April 2003. Following a US Supreme Court decision in MedImmune's favour in January 2007, the case had been returned to the lower courts for further proceedings.

### **TOPROL-XL (METOPROLOL SUCCINATE)**

In 2003, AstraZeneca filed a patent infringement action against KV Pharmaceutical Company (KV) in the US District Court for the Eastern District of Missouri in response to KV's notification of its intention to market a generic version of *Toprol-XL* tablets in the 200mg dose prior to the expiration of AstraZeneca's patents covering the substance and its formulation. In response to later similar notices from KV related to the 25mg, 50mg and 100mg doses, AstraZeneca filed further actions. KV responded in each instance and filed counterclaims alleging non-infringement, invalidity and unenforceability of the listed patents.

In 2004, AstraZeneca filed a patent infringement action against Andrx Pharmaceuticals LLC (Andrx) in the US District Court for the District of Delaware in response to Andrx's notification of its intention to market a generic version of *Toprol-XL* tablets in the 50mg dose prior to the expiration of AstraZeneca's patents. In response to two later similar notices from Andrx related to the 25mg, 100mg and 200mg doses, AstraZeneca filed two additional patent infringement actions in the same court. In each instance, Andrx claimed that each of the listed patents is invalid, not infringed and unenforceable.

In 2004, AstraZeneca filed a patent infringement action against Eon Labs Manufacturing Inc., which was later acquired by Sandoz Inc. (Sandoz), in the US District Court for the District of Delaware in response to Sandoz's notification of its intention to market generic versions of *Toprol-XL* tablets in the 25mg, 50mg, 100mg and 200mg doses prior to the expiration of AstraZeneca's patents. In its response, Sandoz alleged that each of the listed patents is invalid, not infringed and unenforceable. Sandoz also alleged that the filing of the infringement complaints, as well as other actions by AstraZeneca, constitutes anti-competitive conduct in violation of US anti-trust laws. Pursuant to a joint motion of AstraZeneca and Sandoz, these anti-trust claims were severed from the case and stayed, for possible consideration depending on the outcome of the trial of the patent claims.

All of the patent litigation relating to *Toprol-XL* against KV, Andrx and Sandoz was consolidated for pre-trial discovery purposes and motion practice in the US District Court for the Eastern District of Missouri. The defendants filed a motion for summary judgment in 2004 alleging that the *Toprol-XL* patents were invalid due to double patenting. A summary judgment motion of unenforceability was filed by the defendants in 2005 and AstraZeneca filed summary judgment motions on infringement and validity in 2005. In January 2006, the US District Court for the Eastern District of Missouri issued a ruling finding that the two patents-in-suit were unenforceable and invalid. AstraZeneca appealed the District Court decision to the US Court of Appeals for the Federal Circuit. In July 2007, a three-judge panel of the Federal Circuit unanimously ruled that the inequitable conduct determination by the District Court was improper and therefore the issue of inequitable conduct was remanded to the District Court. The panel upheld, however, in a divided decision, the finding that the *Toprol-XL* patents were invalid due to double patenting. In August 2007, AstraZeneca petitioned the Federal Circuit for reconsideration of the invalidity determination. Reconsideration was denied in October 2007. In the second and third quarters of 2008, the remaining issues before the District Court were settled with all three defendants for amounts not material to AstraZeneca.

In the first quarter of 2006, AstraZeneca was served with 14 complaints filed in the US District Courts in Delaware, Massachusetts and Florida against AstraZeneca Pharmaceuticals LP, AstraZeneca LP, AstraZeneca AB and Aktiebolaget Hässle. The complaints were putative class actions filed on behalf of both direct purchasers and indirect purchasers that allege that the AstraZeneca defendants attempted to illegally maintain monopoly power in the US over *Toprol-XL* in violation of the Sherman Act through the listing of invalid and unenforceable patents in the FDA Orange Book and the enforcement of such patents through litigation against generic manufacturers seeking to market metoprolol succinate. The complaints seek treble damages based on alleged overcharges to the putative classes of plaintiffs. These 14 complaints were consolidated into two amended complaints in the US District Court in Delaware, one on behalf of direct purchasers, and one on behalf of indirect purchasers. The lawsuits are based upon the 2006 ruling described above by the US District Court for the Eastern District of Missouri in the consolidated patent litigation against KV, Andrx and Sandoz, that the AstraZeneca patents relating to *Toprol-XL* are invalid and unenforceable. In 2006 AstraZeneca filed a motion seeking to dismiss or, in the alternative, stay the consolidated complaint in both anti-trust cases. As noted above, AstraZeneca appealed the District Court decision in the underlying patent litigation, which resulted in a reversal and remand on the issue of inequitable conduct and affirmation that the *Toprol-XL* patents were invalid. AstraZeneca's motion to dismiss the anti-trust complaints is still pending. AstraZeneca denies the allegations of the anti-trust complaints and will vigorously defend the lawsuits.

### **ZESTRIL (LISINOPRIL)**

In 1996, two of AstraZeneca's predecessor companies, Zeneca Limited and Zeneca Pharma Inc. (as licensees), Merck & Co., Inc. and Merck Frosst Canada Inc. (together Merck) commenced a patent infringement action in the Federal Court of Canada against Apotex Inc. (Apotex), alleging infringement of Merck's lisinopril patent. Apotex sold a generic version of AstraZeneca's *Zestril* and Merck's *Prinivil*™ tablets. Apotex admitted infringement but raised positive defences to infringement, including that it acquired certain quantities of lisinopril prior to issuance of the patent and that certain quantities were licensed under a compulsory licence. Apotex also alleged invalidity of the patent. Following a trial in early 2006, in April 2006 the Federal Court of Canada ruled in favour of AstraZeneca and Merck on the key issues and Apotex stopped selling lisinopril in May 2006. In October 2006, the Federal Court of Appeal in Canada upheld the lower court's decision and dismissed Apotex's appeal. In December 2006, Apotex sought leave to appeal to the Supreme Court of Canada. The Supreme Court of Canada dismissed Apotex's leave to appeal in May 2007. AstraZeneca

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

intends to pursue a reference proceeding in the Federal Court to quantify the damages related to the infringement by Apotex. Apotex re-commenced the sale of lisinopril in October 2007 after expiry of the relevant patent.

### AVERAGE WHOLESALE PRICE LITIGATION

AstraZeneca is a defendant along with many other pharmaceutical manufacturers in several sets of cases involving allegations that defendants caused entities to overpay for prescription drugs as a result of causing the publication of allegedly inflated wholesale list prices. The first set of cases were filed in December 2001 in the US District Court in Boston, Massachusetts on behalf of a putative class of plaintiffs. Following the Massachusetts complaint, nearly identical class action suits were filed in two other states, which have been consolidated with the Massachusetts action for pre-trial purposes, pursuant to federal Multi-District Litigation (MDL) procedures. Second, AstraZeneca and other manufacturers have since been sued in similar lawsuits filed by the State Attorneys General of Pennsylvania, Nevada, Montana, Wisconsin, Illinois, Alabama, Kentucky, Arizona, Mississippi, Hawaii, Alaska, Idaho, Iowa and Utah as well as by multiple individual counties in the State of New York. The Attorney General lawsuits seek to recover alleged overpayments under Medicaid and other state-funded healthcare programmes. In several cases, the states are also suing to recover alleged overpayments by state residents. Several of these suits have also been consolidated with the Massachusetts action for pre-trial purposes, pursuant to federal MDL procedures. Third, private insurers and consumers have filed putative state-wide class actions in Arizona and New Jersey alleging damages relating to private reimbursement of prescription drugs.

In the MDL action in January 2006, the District Court certified three classes of plaintiffs against the 'Track 1' manufacturer defendants, AstraZeneca, GlaxoSmithKline, Bristol-Myers Squibb, Schering-Plough and Johnson & Johnson. The three certified classes are: a nationwide class of consumers who made co-payments for certain physician-administered drugs reimbursed under the Medicare Part B programme (Part B drugs) (Class 1); a Massachusetts-only class of third party payers, including insurance companies, union health and welfare benefit plans, and self-insured employers, who covered consumer co-payments for Part B drugs (Class 2); and a Massachusetts-only class of third party payers and consumers who paid for Part B drugs outside of the Medicare programme (Class 3). For all classes, the only AstraZeneca drug at issue is Zoladex (goserelin acetate implant).

In May 2007, the parties reached a proposed settlement agreement resolving the Class 1 claims. The settlement, which was approved by the Court in December 2008, will involve payments of up to \$24m to reimburse individual class members submitting claims, plus attorneys' fees of \$8.58m. AstraZeneca has agreed that a portion of any unclaimed settlement amounts will be donated to charitable organisations funding cancer patient care and research. Notice of the proposed settlement was mailed to potential class members in December 2007. A provision of \$27m was established in 2007. In January 2009, one of the class members filed a notice of appeal challenging the settlement.

In June 2007 and November 2007, the MDL Court issued decisions, after a bench trial, on liability and damages on Classes 2 and 3. The Court found AstraZeneca liable under the Massachusetts consumer protection statute for engaging in unfair and deceptive conduct in connection with the pricing of Zoladex during the period 1998 to 2003. The Court awarded double damages (with pre-judgment interest) of \$5.5m for Class 2, and single damages (with pre-judgment interest) of \$7.4m for Class 3. AstraZeneca believes the decision to be in error and filed an appeal. The US Court of Appeals for the First Circuit held oral argument on the appeal in November 2008.

The MDL Court's award on Classes 2 and 3, if it survives appeal, relates to damages incurred by payers within the Commonwealth of Massachusetts only. Plaintiffs filed a motion seeking certification of multi-state classes of third party payers in an effort to pursue similar claims for damages under the consumer protection statutes of other states. In September 2008, the MDL Court granted, in part, the plaintiffs' motion for certification of multi-state versions of Class 2 and Class 3 relating to Zoladex. AstraZeneca believes the decision to be in error. In January 2009, the Court granted AstraZeneca's motion to stay the entry of the order pending its appeal of the Court's award relating to Massachusetts payers.

The multiple Attorney General lawsuits pending against AstraZeneca and other manufacturers nationwide, which involve numerous drugs in addition to Zoladex, remain pending against AstraZeneca.

The average wholesale price case filed by the Alabama Attorney General was tried in Circuit Court in Montgomery, Alabama in February 2008. The trial resulted in a jury verdict against AstraZeneca on the State's claims of fraudulent concealment and misrepresentation, and an award of compensatory damages of \$40m and punitive damages of \$175m. In June 2008, the trial court held a hearing on AstraZeneca's request for post-trial relief and reduced the punitive damages award, as required by statute, to \$120m. AstraZeneca has filed an appeal with the Alabama Supreme Court. In December 2008, AstraZeneca filed its opening brief supporting its appeal. The appeal seeks to have the entire judgment reversed or, in the alternative, a new trial.

Separately, MedImmune is also involved in various lawsuits brought by various states and counties in the US alleging manipulation of average wholesale prices by several defendants, including MedImmune. The lawsuits were filed between 2003 and 2007 by Alabama, Mississippi, Iowa, New York City, and by various New York counties. The status of the various lawsuits by various states and counties alleging manipulation of average wholesale price by several defendants, including MedImmune, did not change materially during the financial year ended 31 December 2008 except that, in 2008, the State of Kansas filed a suit against a number of defendants, including MedImmune, in the District Court of Wyandotte County, Kansas.

The allegations made in respect of the average wholesale price lawsuits described in this section are denied and will be vigorously defended.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

### 340B CLASS ACTION LITIGATION

In August 2005, AstraZeneca was named as a defendant, along with multiple other pharmaceutical manufacturers, in a class action suit filed by the County of Santa Clara in California state court on behalf of similarly situated California counties and cities that allegedly overpaid for drugs covered by the federal '340B' programme. The 340B programme entitles hospitals and clinics that treat a substantial portion of uninsured patients to preferential drug pricing for outpatient drugs.

The case was removed to federal court, the US District Court for the Northern District of California. In 2006, the US District Court dismissed each of the allegations in Santa Clara County's complaint. The County appealed the dismissal, and the US Court of Appeals for the Ninth Circuit reversed the dismissal in August 2008, enabling the County to continue its suit under a third party beneficiary breach of contract theory. Recently, two more Counties became plaintiffs, the County of Santa Cruz and the County of Riverside. In November 2008, the US District Court granted a motion for protective order, thereby limiting the scope of discovery in the manufacturers' favour; however, the US District Court certified the issue for an immediate interlocutory appeal.

On all other issues not before the appellate court, discovery is currently proceeding before the US District Court and a trial date has been set for February 2010. AstraZeneca intends to vigorously defend these claims.

### DRUG IMPORTATION ANTI-TRUST LITIGATION

In August 2004, Californian retail pharmacy plaintiffs filed an action in the Superior Court of California alleging a conspiracy by AstraZeneca and approximately 15 other pharmaceutical manufacturer defendants to set the price of drugs sold in California at or above the Canadian sales price for those same drugs and otherwise restrict the importation of pharmaceuticals into the US. In July 2005, the Court overruled in part and sustained in part, without leave to amend, the defendants' motion to dismiss the plaintiffs' third amended complaint in these proceedings. The Court overruled the defendants' motion in respect of conspiracy claims but sustained the motion in respect of the California Unfair Competition Law claims. In December 2006, the Court granted the defendants' motion for summary judgment and the case was subsequently dismissed. Plaintiffs appealed that decision and the Court of Appeal of the State of California affirmed the lower Court's decision. Plaintiffs have appealed to the Supreme Court of California, which has decided to hear the appeal.

AstraZeneca denies the material allegations in the California action and is vigorously defending this matter.

### PAIN PUMP LITIGATION

Starting in February 2008, AstraZeneca LP, AstraZeneca Pharmaceuticals LP, Zeneca Holdings Inc., and/or AstraZeneca PLC have been named as defendants and served in approximately 41 lawsuits, involving approximately 48 plaintiffs, filed in various US jurisdictions, alleging injuries caused by third party pain pumps. The complaints in these cases generally allege that the use of *Marcaine*, *Sensorcaine*, *Xylocaine* and/or *Naropin*, with or without epinephrine, in pain pumps that were implanted into patients in connection with arthroscopic surgery, caused chondrolysis. Other named defendants in these cases are other manufacturers and distributors of bupivacaine and lidocaine and other pain medications, pain pump manufacturers, and in some cases the surgeons. To date, 25 plaintiffs have dismissed their cases against the AstraZeneca defendants while the case was in preliminary stages, and the AstraZeneca defendants have filed pending motions to dismiss several other cases. In addition, three plaintiffs have voluntarily dismissed AstraZeneca PLC but have maintained their suits against other AstraZeneca defendants.

Rights to market *Sensorcaine*, *Xylocaine* and *Naropin* in the US were sold to Abraxis Bioscience Inc. (Abraxis) in June 2006 but many of these lawsuits may be a retained liability under the terms of the Asset Purchase Agreement with Abraxis. To date, AstraZeneca has tendered six of the active claims to Abraxis.

It was previously reported that plaintiffs moved to consolidate the federal pain pump cases under the Multi-District Litigation (MDL) process. The Judicial Panel on MDL denied that motion in August 2008. Accordingly, the cases will continue as individual lawsuits.

AstraZeneca intends to vigorously defend these cases.

### ANTI-TRUST

In July 2006, AstraZeneca Pharmaceuticals LP was named as a defendant, along with a number of other pharmaceutical manufacturers and wholesalers, in a complaint filed by RxUSA Wholesale, Inc. (RxUSA) in the US District Court for the Eastern District of New York. The complaint alleges that the defendants violated federal and state anti-trust laws by, amongst other things, allegedly refusing to deal with RxUSA and other 'secondary wholesalers' in the wholesale pharmaceutical industry. The plaintiff alleges a conspiracy among the manufacturers and seeks an injunction and treble damages. AstraZeneca vigorously denies the allegations and in November 2006 filed a motion to dismiss the complaint. The motion to dismiss is pending.

For a description of other anti-trust-related litigation involving AstraZeneca, see the subsections entitled *Nexium* (esomeprazole), *Losec/PriLOSEC* (omeprazole), *Nolvadex* (tamoxifen) and *Toprol-XL* (metoprolol succinate) in this Note 25 to the Financial Statements.

In January 2008 AstraZeneca, together with several other companies, was the subject of an unannounced inspection simultaneous with the launch by the EU Commission (Commission) of a Sectoral Inquiry (Inquiry) into the pharmaceutical industry. The Inquiry relates to the introduction of innovative and generic medicines and covers commercial and other practices, including the use of patents. On 28 November 2008, the Commission published its preliminary report. The report does not identify wrongdoing by any individual companies but is stated to provide a factual basis for further consideration. The Commission has stated that it will commence individual investigations where there are indications

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

that competition rules have been breached. The preliminary report focuses on a number of issues relating to competition in the EU, referring to strategies which the Commission believes pharmaceutical companies use to block or delay generic entry. Such strategies include: patent filings and enforcement; patent settlement agreements and other agreements; interventions before national regulatory authorities; and life-cycle management strategies.

A final report is expected in Spring 2009. AstraZeneca has been co-operating fully with the Commission and participating in European Federation for Pharmaceutical Industries and Associations activities.

### FEDERAL TRADE COMMISSION (FTC) STUDY ON AUTHORISED GENERICS

In October 2007, AstraZeneca received a Special Order from the FTC, requesting certain information in connection with the FTC's industry-wide study of the short- and long-term competitive effects of authorised generics in the prescription drug marketplace. AstraZeneca completed and submitted its response to the FTC in January 2008.

### ADDITIONAL GOVERNMENT INVESTIGATIONS INTO DRUG MARKETING PRACTICES

As is true for most, if not all, major prescription pharmaceutical companies operating in the US, AstraZeneca is currently involved in multiple US federal and state investigations into drug marketing and pricing practices. In addition to the investigations described above, the US Attorney's Office (USAO) in Philadelphia is directing two investigations which involve requests for documents and information relating to contracting and disease management programmes with two of the leading national Pharmacy Benefits Managers. AstraZeneca has been co-operating with these investigations and the USAO may decline to intervene in one or both of these investigations. The USAO in Boston is conducting an additional investigation with a leading provider of pharmacy services to long-term care facilities. According to a securities filing, that investigation may be the subject of one or more *qui tam* complaints that were filed under the False Claims Act.

In addition to the Attorney General investigations regarding Seroquel described above, the Delaware Attorney General's Office is investigating certain sales and marketing practices of AstraZeneca, which appear to focus on AstraZeneca's prior interactions with physicians in the State of Delaware. In addition, AstraZeneca is providing information in response to two informal requests for information relating to nominal pricing under the Medicaid rebate program, one from the US Department of Justice and one from the Attorney General of the State of Michigan.

It is not possible to predict the outcome of any of these investigations, which could include the payment of damages and the imposition of fines, penalties and administrative remedies.

### SERIOUS FRAUD OFFICE (SFO) INQUIRY

In 2007, AstraZeneca received from the SFO in the UK a request for documentation about its involvement in the UN Oil for Food programme in Iraq. AstraZeneca denies any allegation of illegal or unethical behaviour in its trading relationships with Iraq. AstraZeneca has complied with the SFO's original request for documentation and with further requests for information received during the course of 2008. It is not currently possible to predict the outcome of this inquiry.

### OTHER GOVERNMENT INVESTIGATIONS

From time to time, AstraZeneca receives enquiries and requests for information from a number of governmental and/or other regulatory bodies relating to a range of issues (some, but not all, of which may relate directly to the business of AstraZeneca) and some of which are confidential in nature. AstraZeneca seeks to comply with these requests in an appropriate and timely manner and generally on the basis of legal advice received. The nature and scope of the investigation in relation to which such enquiries and requests for information have been received is not always known to AstraZeneca. Consequently, it is not always possible to determine whether such enquiries and investigations relate specifically to AstraZeneca or are merely a means of gathering factual information in the context of an unrelated third-party issue.

### CONGRESSIONAL INVESTIGATIONS

Since March 2007 AstraZeneca, along with several other manufacturers, has received several letters from the Committee on Oversight and Government Reform of the US House of Representatives as part of the Committee's ongoing oversight of the pharmaceutical industry's research and marketing practices. The Committee has requested that AstraZeneca provide clinical and marketing information relating to Seroquel and one letter requested pricing information for several AstraZeneca brands.

Since August 2007 AstraZeneca has received multiple letters from the Ranking Member of the Finance Committee of the US Senate requesting information regarding AstraZeneca's payments to certain identified physicians and their prescribing information related to Seroquel. In addition, the Finance Committee requested sales and marketing information regarding the use of Seroquel in nursing homes. The Finance Committee also requested information regarding use of a third party company for certain aspects of clinical studies and publications related to Seroquel, as well as information regarding AstraZeneca's transparency efforts in certain business areas. AstraZeneca is co-operating with both Committees.

### INFORMAL US SECURITIES AND EXCHANGE COMMISSION (SEC) INQUIRY

In October 2006, AstraZeneca received from the SEC a letter requesting documents related to its business activities in Italy, Croatia, Russia and Slovakia for the period 1 October 2003 to the present. The SEC's request generally seeks documents concerning any payments to doctors or government officials and related internal accounting controls. The request also seeks policies, correspondence, audits and other documents concerning compliance with the Foreign Corrupt Practices Act, as well as any allegations or communications with prosecutors' offices relating to corruption or bribery of doctors or government officials. AstraZeneca has produced documents in response to this request. It is not currently possible to predict the outcome of this inquiry.

## 25 COMMITMENTS AND CONTINGENT LIABILITIES CONTINUED

### EMPLOYMENT-WAGE/HOUR LITIGATION

In September 2006, Marc Brody filed a putative class action lawsuit against AstraZeneca LP on behalf of himself and a class of approximately 844 pharmaceutical sales specialists employed by the Group in California during the period 19 September 2002 to the present. The plaintiff alleges he and the proposed class members were unlawfully classified as exempt employees and denied overtime compensation and meal breaks in violation of the California Labour Code. AstraZeneca removed this action to the US District Court for the Central District of California in October 2006. The plaintiff filed a first amended complaint in March 2007, for failure to provide meal and rest periods, failure to pay all wages earned each pay period, failure to provide accurate wage statements, failure to pay wages in a timely manner upon termination of employment, unfair competition and civil penalties. AstraZeneca denies the allegations made by the plaintiff, asserting that the sales specialists are properly classified under various exemptions to the wage laws. Discovery is ongoing. (The plaintiff's lawyers are also pursuing similar claims in lawsuits against most of the major pharmaceutical companies).

In separate lawsuits against AstraZeneca, the firms representing the plaintiff filed additional state wage-and-hour class actions, the first under the Pennsylvania Minimum Wage Act and Wage Payment Collection Law in the US District Court for the Western District of Pennsylvania on behalf of two plaintiffs and a putative class of approximately 473 sales specialists working in Pennsylvania during the period March 2004 to the present; and the second in the US District Court for the Southern District of New York on behalf of one plaintiff and a putative class of approximately 890 sales specialists working in the state of New York during the period June 2001 to the present, claiming the sales specialists were misclassified as exempt from overtime pay under New York labour law.

Additionally, in June 2007, the firms representing the plaintiff filed a nationwide collective action based on federal wage-and-hour law (FLSA) in the US District Court for the District of Delaware, seeking unpaid overtime compensation and liquidated damages. The lawsuit has a potential class size of 8,300 current and former sales specialists employed by the Group in the US during the period June 2004 to the present. The parties have negotiated a stipulation of dismissal of this lawsuit, and the action has been dismissed with prejudice. The plaintiff's counsel is expected to file a new FLSA action with a different named plaintiff in the near future.

In June 2008, the US District Court, Central District of California, granted summary judgment in favour of AstraZeneca, dismissing all claims filed by the named plaintiff, Marc Brody, and finding the motion for class certification to be moot. Plaintiff has filed a notice of appeal with the Ninth Circuit Court of Appeals in California.

AstraZeneca is defending three putative class action lawsuits alleging various violations of state wage-and-hour laws by challenging the way AstraZeneca has classified its sales representatives as exempt from overtime pay requirements. In Hummel v. AstraZeneca, the US District Court for the Southern District of New York granted AstraZeneca's motion for summary judgment and dismissed the case in September 2008. In October 2008, Hummel filed a notice of appeal to the Second Circuit Court of Appeals. On 20 January 2009, the parties finalised a resolution agreement that will result in Hummel dismissing the appeal with prejudice in exchange for AstraZeneca's agreement to waive its costs.

### TAXATION

Where tax exposures can be quantified, an accrual is made based on best estimates and management's judgement. Details of the movements in relation to material tax exposures are discussed below.

AstraZeneca faces a number of transfer pricing audits in jurisdictions around the world and, in some cases, is in dispute with the tax authorities. The issues under discussion are often complex and can require many years to resolve. Accruals for tax contingencies require management to make estimates and judgements with respect to the ultimate outcome of a tax audit, and actual results could vary from these estimates. The international tax environment presents increasingly challenging dynamics for the resolution of transfer pricing disputes. These disputes usually result in taxable profits being increased in one territory and correspondingly decreased in another. Our balance sheet positions for these matters reflect appropriate corresponding relief in the territories affected. Management considers that at present such corresponding relief will be available but given the challenges in the international tax environment will keep this aspect under careful review. The total net accrual included in the Financial Statements to cover the worldwide exposure to transfer pricing audits is \$1,628m, an increase of \$306m due to a number of new audits, revisions of estimates relating to existing audits, offset by a number of negotiated settlements and exchange rate effects.

Included in the total net accrual are amounts in respect of the following transfer pricing arrangements:

- > AstraZeneca and Her Majesty's Revenue & Customs (HMRC) have made a joint referral to the UK Court in respect of transfer pricing between our UK and one of our overseas operations for the years 1996 to date as there continues to be a material difference between the Group's and HMRC's positions. An additional referral in respect of controlled foreign company aspects of the same case was made during 2008. Absent a negotiated settlement, litigation is set to commence in 2010.
- > AstraZeneca has applied for two advance pricing agreements (APA's) in relation to intra-group transactions between the UK and the US and the UK and Japan. Both APA's are being progressed through competent authority proceedings under the relevant double tax treaties.

Management continues to believe that AstraZeneca's positions on all its transfer pricing audits and disputes are robust and that AstraZeneca is appropriately provided.

For transfer pricing audits where AstraZeneca and the tax authorities are in dispute, AstraZeneca estimates the potential for reasonably possible additional losses above and beyond the amount provided to be up to \$400m; however, management believes that it is unlikely that these additional losses will arise. Of the remaining tax exposures, AstraZeneca does not expect material additional losses. It is not possible to estimate the timing of tax cash flows in relation to each outcome, however, it is anticipated that a number of significant disputes may be resolved over the next one to two years. Included in the provision is an amount of interest of \$365m. Interest is accrued as a tax expense.

## 26 LEASES

Total rentals under operating leases charged to the income statement were as follows:

	2008 \$m	2007 \$m	2006 \$m
	206	210	197

The future minimum lease payments under operating leases that have initial or remaining terms in excess of one year at 31 December 2008 were as follows:

	2008 \$m	2007 \$m	2006 \$m
<b>Obligations under leases comprise</b>			
No later than one year	101	103	108
Rentals due after more than one year:			
Later than five years	145	184	161
Later than one year and not later than five years	212	195	182
	357	379	343
	458	482	451

## 27 STATUTORY AND OTHER INFORMATION

	2008 \$m	2007 \$m	2006 \$m
Fees payable to KPMG Audit Plc and its associates:			
Group audit fee	3.2	3.6	3.1
Fees payable to KPMG Audit Plc and its associates for other services:			
The audit of subsidiaries pursuant to legislation	7.1	6.1	5.4
Other services pursuant to legislation	3.3	3.6	4.1
Taxation	0.9	1.1	1.2
All other services	1.7	0.7	1.0
Fees payable to KPMG Audit Plc in respect of the Group's pension schemes:			
The audit of subsidiaries' pension schemes	0.6	0.6	0.5
	16.8	15.7	15.3

Other services pursuant to legislation includes fees of \$2.5m (2007: \$2.7m; 2006: \$3.2m) in respect of section 404 of the Sarbanes-Oxley Act.

Taxation services consist of tax compliance services and tax advice.

### RELATED PARTY TRANSACTIONS

The Group had no material related party transactions which might reasonably be expected to influence decisions made by the users of these Financial Statements.

### KEY MANAGEMENT PERSONNEL COMPENSATION

Key management personnel are defined for the purpose of disclosure under IAS 24 'Related Party Disclosures' as the Board of Directors, the Senior Executive Team and the Company Secretary.

	2008 \$'000	2007 \$'000	2006 \$'000
Short-term employee benefits	21,973	31,525	21,321
Post-employment benefits	2,290	2,072	3,191
Share-based payments	13,210	11,515	8,417
	37,473	45,112	32,929

Short-term employee benefits in 2007 include one-off employee costs of \$11m in relation to the acquisition of MedImmune.

Total remuneration is included within employee costs (Note 24).

### SUBSEQUENT EVENTS

There were no material subsequent events.

# 164 PRINCIPAL SUBSIDIARIES

At 31 December 2008	Country	Percentage of voting share capital held	Principal activity
<b>UK</b>			
AstraZeneca UK Limited	England	100	Research and development, manufacturing, marketing
AstraZeneca Treasury Limited	England	100	Treasury
<b>Continental Europe</b>			
NV AstraZeneca SA	Belgium	100	Manufacturing, marketing
AstraZeneca Dunkerque Production SCS	France	100	Manufacturing
AstraZeneca SAS	France	100	Research, manufacturing, marketing
AstraZeneca GmbH	Germany	100	Development, manufacturing, marketing
AstraZeneca Holding GmbH	Germany	100	Manufacturing, marketing
AstraZeneca SpA	Italy	100	Manufacturing, marketing
AstraZeneca Farmaceutica Spain SA	Spain	100	Manufacturing, marketing
AstraZeneca AB	Sweden	100	Research and development, manufacturing, marketing
AstraZeneca BV	The Netherlands	100	Marketing
<b>The Americas</b>			
AstraZeneca Canada Inc.	Canada	100	Research, manufacturing, marketing
AZ Reinsurance Limited	Cayman Islands	100	Insurance and reinsurance underwriting
IPR Pharmaceuticals Inc.	Puerto Rico	100	Development, manufacturing, marketing
AstraZeneca LP	US	99	Research and development, manufacturing, marketing
AstraZeneca Pharmaceuticals LP	US	100	Research and development, manufacturing, marketing
Zeneca Holdings Inc.	US	100	Manufacturing, marketing
MedImmune, LLC	US	100	Research and development, manufacturing, marketing
<b>Asia, Africa &amp; Australasia</b>			
AstraZeneca Pty Limited	Australia	100	Development, manufacturing, marketing
AstraZeneca KK	Japan	80	Manufacturing, marketing

All shares are held indirectly.

The companies and other entities listed above are those whose results or financial position principally affected the figures shown in the Group Financial Statements. A full list of subsidiaries, joint ventures and associates will be annexed to the Company's next annual return filed with the Registrar of Companies. The country of registration or incorporation is stated alongside each company. The accounting year ends of subsidiaries and associates are 31 December, except for Aptium Oncology, Inc. which, owing to local conditions and to avoid undue delay in the preparation of the Financial Statements, is 30 November. AstraZeneca operates through 283 subsidiaries worldwide. Products are manufactured in 18 countries worldwide and are sold in over 100 countries. The Group Financial Statements consolidate the Financial Statements of the Company and its subsidiaries at 31 December 2008.

# INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF ASTRAZENECA PLC

We have audited the Company Financial Statements of AstraZeneca PLC for the year ended 31 December 2008 which comprise the Balance Sheet and the related notes on pages 166 to 171. These Company Financial Statements have been prepared under the accounting policies set out therein. We have also audited the information in the Directors' Remuneration Report that is described as having been audited.

We have reported separately on the Group Financial Statements of AstraZeneca PLC for the year ended 31 December 2008.

This report is made solely to the Company's members, as a body, in accordance with section 235 of the Companies Act 1985. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

## RESPECTIVE RESPONSIBILITIES OF DIRECTORS AND AUDITORS

The Directors' responsibilities for preparing the Annual Report and Form 20-F Information, the Directors' Remuneration Report and the Company Financial Statements in accordance with applicable law and UK Accounting Standards (UK Generally Accepted Accounting Practice) are set out in the Statement of Directors' Responsibilities on page 98.

Our responsibility is to audit the Company Financial Statements and the part of the Directors' Remuneration Report to be audited in accordance with relevant legal and regulatory requirements and International Standards on Auditing (UK and Ireland).

We report to you our opinion as to whether the Company Financial Statements give a true and fair view and whether the Company Financial Statements and the part of the Directors' Remuneration Report to be audited have been properly prepared in accordance with the Companies Act 1985. We also report to you whether in our opinion the information given in the Directors' Report is consistent with the Company Financial Statements.

In addition we report to you if, in our opinion, the Company has not kept proper accounting records, if we have not received all the information and explanations we require for our audit, or if information specified by law regarding Directors' remuneration and other transactions is not disclosed.

We read the other information contained in the Annual Report and Form 20-F Information and consider whether it is consistent with the audited Company Financial Statements. We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the Company Financial Statements. Our responsibilities do not extend to any other information.

## BASIS OF AUDIT OPINION

We conducted our audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the Company Financial Statements and the part of the Directors' Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgements made by the Directors in the preparation of the Company Financial Statements, and of whether the accounting policies are appropriate to the Company's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Company Financial Statements and the part of the Directors' Remuneration Report to be audited are free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the Company Financial Statements and the part of the Directors' Remuneration Report to be audited.

## OPINION

In our opinion:

- > The Company Financial Statements give a true and fair view, in accordance with UK Generally Accepted Accounting Practice, of the state of the Company's affairs as at 31 December 2008.
- > The Company Financial Statements and the part of the Directors' Remuneration Report to be audited have been properly prepared in accordance with the Companies Act 1985.
- > The information given in the Directors' Report is consistent with the Company Financial Statements.

## KPMG AUDIT PLC

Chartered Accountants  
Registered Auditor  
8 Salisbury Square  
London EC4Y 8BB

29 January 2009

## BALANCE SHEET

		Notes	2008 \$m	2007 (restated) \$m
<b>At 31 December</b>				
<b>Fixed assets</b>				
Fixed asset investments	1		<b>26,727</b>	31,079
<b>Current assets</b>				
Debtors – other			<b>1</b>	1
Debtors – amounts owed by group undertakings			<b>8,217</b>	6,984
			<b>8,218</b>	6,985
<b>Total assets</b>			<b>34,945</b>	38,064
<b>Creditors: Amounts falling due within one year</b>				
Non-trade creditors	2		<b>(414)</b>	(4,353)
Interest bearing loans and borrowings	3		<b>(650)</b>	–
			<b>(1,064)</b>	(4,353)
<b>Net current assets</b>			<b>7,154</b>	2,632
<b>Total assets less current liabilities</b>			<b>33,881</b>	33,711
<b>Creditors: Amounts falling due after more than one year</b>				
Amounts owed to group undertakings	3		<b>(283)</b>	(283)
Interest bearing loans and borrowings	3		<b>(10,255)</b>	(10,482)
			<b>(10,538)</b>	(10,765)
<b>Net assets</b>			<b>23,343</b>	22,946
<b>Capital and reserves</b>				
Called-up share capital	6		<b>362</b>	364
Share premium account	4		<b>2,046</b>	1,888
Capital redemption reserve	4		<b>94</b>	91
Other reserves	4		<b>2,743</b>	2,565
Profit and loss account	4		<b>18,098</b>	18,038
<b>Shareholders' funds</b>	5		<b>23,343</b>	22,946

\$m means millions of US dollars.

The Financial Statements on pages 166 to 171 were approved by the Board of Directors on 29 January 2009 and were signed on its behalf by:

# ACCOUNTING POLICIES

## BASIS OF ACCOUNTING

The Company Financial Statements are prepared under the historical cost convention, modified to include revaluation to fair value of certain financial instruments as described below, in accordance with the Companies Act 1985 and UK Generally Accepted Accounting Principles (UK GAAP). The Group Financial Statements have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union and are presented on pages 103 to 107.

The following paragraphs describe the main accounting policies under UK GAAP, which have been applied consistently.

## NEW ACCOUNTING STANDARDS

The Company has adopted UITF Abstract 44 (IFRIC 11): 'FRS 20 (IFRS 2) Group and Treasury Share Transactions', which requires a parent company to recognise a capital contribution in respect of share option awards granted to employees of its subsidiaries for services provided to the subsidiary. The effect of adoption on the Company is to increase investments in subsidiaries for the aggregate amount of all such contributions and to increase other reserves. Comparative information has been restated to reflect this.

The Company has also adopted Amendments to FRS 17 'Retirement Benefits' and the Amendment to FRS 26 and FRS 29 'Reclassification of Financial Assets'. The adoption of these amendments had no impact on the net results or net assets of the Company.

The Amendment to FRS 20 'Share-based Payment', UITF Abstract 46 'Hedges of a Net Investment in a Foreign Operation', Amendment to FRS 26 'Financial Instruments: Recognition and Measurement – Eligible Hedged Items' and Amendment to FRS 8 'Related Party Disclosures' have been issued but not yet adopted by the Company.

## FOREIGN CURRENCIES

Profit and loss account items in foreign currencies are translated into US dollars at average rates for the relevant accounting periods. Assets and liabilities are translated at exchange rates prevailing at the date of the Company balance sheet. Exchange gains and losses on loans and on short term foreign currency borrowings and deposits are included within net interest payable. Exchange differences on all other transactions, except relevant foreign currency loans, are taken to operating profit.

## TAXATION

The charge for taxation is based on the result for the year and takes into account taxation deferred because of timing differences between the treatment of certain items for taxation and for accounting purposes. Full provision is made for the effects of these differences. Deferred tax assets are recognised where it is more likely than not that the amount will be realised in the future. These estimates require judgements to be made including the forecast of future taxable income. Deferred tax balances are not discounted.

Accruals for tax contingencies require management to make judgements and estimates in relation to tax audit issues. Tax benefits are not recognised unless the tax positions will probably be sustained. Once considered to be probable, management reviews each material tax benefit to assess whether a provision should be taken against full recognition of that benefit on the basis of potential settlement through negotiation and/or litigation.

Any recorded exposure to interest on tax liabilities is provided for in the tax charge. All provisions are included in creditors due within one year.

## INVESTMENTS

Fixed asset investments, including investments in subsidiaries, are stated at cost and reviewed for impairment if there are indications that the carrying value may not be recoverable.

## FINANCIAL INSTRUMENTS

Loans and other receivables are held at amortised cost. Long-term loans payable are held at amortised cost.

## LITIGATION

Through the normal course of business, AstraZeneca is involved in legal disputes, the settlement of which may involve cost to the Company. Provision is made where an adverse outcome is probable and associated costs can be estimated reliably. In other cases, appropriate descriptions are included.

# 168 NOTES TO THE COMPANY FINANCIAL STATEMENTS

## 1 FIXED ASSET INVESTMENTS

	Investments in subsidiaries		
	Shares (restated) \$m	Loans \$m	Total (restated) \$m
Cost and net book value at 1 January 2008, as previously reported	15,286	15,069	30,355
Prior year adjustment – UITF 44	724	–	724
Restated at beginning of year	16,010	15,069	31,079
Additions	14,700	787	15,487
Disposals	(14,700)	–	(14,700)
Transfer to current assets	–	(2,045)	(2,045)
Capital contribution – UITF 44	178	–	178
Exchange	–	(372)	(372)
Amortisation	–	8	8
Repayment of loan	–	(2,908)	(2,908)
<b>Cost and net book value at 31 December 2008</b>	<b>16,188</b>	<b>10,539</b>	<b>26,727</b>

During 2007, the Company formed a new subsidiary, AstraZeneca Intermediate Holdings Limited. On 11 March 2008, the Company sold its wholly owned subsidiary, AstraZeneca UK Limited, to AstraZeneca Intermediate Holdings Limited, in consideration for the issue of further shares in AstraZeneca Intermediate Holdings Limited.

During the year, the Company has adopted the requirements of UITF Abstract 44 'Group and Treasury Share Transactions' and restated prior year comparatives.

## 2 NON-TRADE CREDITORS

	2008 \$m	2007 \$m
<b>Amounts due within one year</b>		
Short-term borrowings (unsecured)	173	4,123
Other creditors	228	206
Amounts owed to group undertakings	13	24
	414	4,353

## 3 LOANS

	Repayment dates	2008 \$m	2007 \$m
<b>Amounts due within one year</b>			
Interest bearing loans and borrowings (unsecured)			
US dollars			
Floating Rate Note	2009	650	–
<b>Amounts due after more than one year</b>			
Amounts owed to subsidiaries (unsecured)			
US dollars			
7.2% Loan	2023	283	283
Interest bearing loans and borrowings (unsecured)			
US dollars			
Floating Rate Note	2009	–	649
5.4% Callable bond	2012	1,742	1,741
5.4% Callable bond	2014	748	747
5.9% Callable bond	2017	1,742	1,741
6.45% Callable bond	2037	2,716	2,715
Euros			
4.625% Non-callable bond	2010	1,053	1,099
5.625% Non-callable bond	2010	702	–
5.125% Non-callable bond	2015	1,051	1,099
Pounds sterling			
5.75% Non-callable bond	2031	501	691
		10,255	10,482

### 3 LOANS CONTINUED

	2008 \$m	2007 \$m
Loans or instalments thereof are repayable:		
After five years from balance sheet date	7,041	7,276
From two to five years	1,742	2,840
From one to two years	1,755	649
Within one year	650	–
Total unsecured	11,188	10,765

With the exception of the floating rate note, all loans are at fixed interest rates. Accordingly the fair values of the loans will change as market rates change. However, since the loans are held at amortised cost, changes in interest rates and the credit rating of the Company do not have any effect on the Company's net assets.

### 4 RESERVES

	Share premium account \$m	Capital redemption reserve \$m	Other reserves (restated) \$m	Profit and loss account \$m	2008 Total \$m	2007 Total (restated) \$m
At beginning of year, as previously reported	1,888	91	1,841	18,038	21,858	19,063
Prior year adjustment – UITF 44	–	–	724	–	724	569
Restated at beginning of year	1,888	91	2,565	18,038	22,582	19,632
Profit for the year	–	–	–	3,436	3,436	9,407
Dividends	–	–	–	(2,767)	(2,767)	(2,658)
Gain/(loss) on cash flow hedge in anticipation of debt issue	–	–	–	1	1	(21)
Share-based payment	–	–	178	–	178	155
Share re-purchases	–	3	–	(610)	(607)	(4,150)
Share premiums	158	–	–	–	158	217
At end of year	2,046	94	2,743	18,098	22,981	22,582
Distributable reserves at end of year	–	–	1,841	16,946	18,787	15,819

As permitted by section 230 (4) of the Companies Act 1985, the Company has not presented its own profit and loss account.

At 31 December 2008, \$1,152m (31 December 2007: \$4,060m) of the profit and loss account reserve was not available for distribution. The majority of this non-distributable amount relates to profit arising on the sale of Astra AB to a subsidiary in 1999, which becomes distributable as the underlying receivable is settled. During 2008, \$2,908m (2007: \$7,069m) of the profit was realised by repayment. Subsequent to the year end, a further \$371m was repaid on 20 January 2009, resulting in additional distributable reserves not included in the figures above. Included in other reserves is a special reserve of \$157m, arising on the redenomination of share capital in 1999.

During the year, the Company has adopted the requirements of UITF Abstract 44 'Group and Treasury Share Transactions' and restated prior year comparatives. The effect of adoption is to increase other reserves by \$902m at 31 December 2008 (31 December 2007: \$724m). These amounts are not available for distribution.

### 5 RECONCILIATION OF MOVEMENT IN SHAREHOLDERS' FUNDS

	2008 \$m	2007 (restated) \$m
At beginning of year, as previously reported	22,222	19,446
Prior year adjustment – UITF 44	724	569
Restated at beginning of year	22,946	20,015
Net profit for the financial year	3,436	9,407
Dividends	(2,767)	(2,658)
Gain/(loss) on cash flow hedge in anticipation of debt issue	1	(21)
Share-based payment	178	155
Issue of AstraZeneca PLC Ordinary Shares	159	218
Re-purchase of AstraZeneca PLC Ordinary Shares	(610)	(4,170)
Net increase in shareholders' funds	397	2,931
<b>Shareholders' funds at end of year</b>	<b>23,343</b>	<b>22,946</b>

Details of dividends paid and payable to shareholders are given in Note 21 to the Consolidated Financial Statements on page 129.

## 6 SHARE CAPITAL

	Authorised	Allotted, called-up and fully paid	
	2008 \$m	2008 \$m	2007 \$m
Issued Ordinary Shares (\$0.25 each)	362	362	364
Unissued Ordinary Shares (\$0.25 each)	238	—	—
Redeemable Preference Shares (£1 each – £50,000)	—	—	—
	600	362	364

The total authorised number of Ordinary Shares at 31 December 2008 was 2,400,000,000, of which 1,447,481,548 Ordinary Shares were in issue.

The Redeemable Preference Shares carry limited class voting rights and no dividend rights. This class of shares is capable of redemption at par at the option of the Company on the giving of seven days' written notice to the registered holder of the shares.

The movements in share capital during the year can be summarised as follows:

	No. of shares (million)	\$m
At 1 January 2008	1,457	364
Issues of shares	4	1
Re-purchase of shares	(14)	(3)
<b>At 31 December 2008</b>	<b>1,447</b>	<b>362</b>

### SHARE RE-PURCHASES

During the year the Company re-purchased, and subsequently cancelled, 13,597,940 Ordinary Shares at an average price of 2397 pence per share. The total consideration, including expenses, was \$610m. The consideration has been charged against the profit and loss account reserve.

### SHARE SCHEMES

A total of 4,078,635 Ordinary Shares were issued during the year in respect of share schemes. Details of movements in the number of Ordinary Shares under option are shown in Note 24 to the Group Financial Statements; details of options granted to Directors are shown in the Directors' Remuneration Report.

### SHARES HELD BY SUBSIDIARIES

No shares in the Company are held by subsidiaries.

## 7 LITIGATION AND ENVIRONMENTAL LIABILITIES

### EXANTA (XIMELAGATRAN)

As previously disclosed, four putative and essentially similar securities class actions were filed in the US against AstraZeneca PLC, Håkan Mogren (who currently serves as a Director of AstraZeneca PLC), Sir Tom McKillop, Jonathan Symonds and Percy Barnevik (who are former Directors of AstraZeneca PLC) between January and March 2005. These actions were subsequently consolidated into a single action in the US District Court for the Southern District of New York. The Consolidated Amended Complaint alleged that the defendants made materially false and misleading statements regarding *Exanta* clinical trials and the status of the *Exanta* new drug application in the US. The plaintiffs purport to assert claims on behalf of purchasers of AstraZeneca publicly traded securities during the period April 2003 to September 2004 under sections 10(b) and 20(a) of the Securities Exchange Act of 1934 and SEC Rule 10b-5.

In an opinion dated 3 June 2008, the US District Court for the Southern District of New York dismissed the case in its entirety by granting the motions to dismiss of AstraZeneca PLC and the individual defendants. Plaintiffs are currently appealing this decision to the US Court of Appeals for the Second Circuit, except for the ruling regarding two of the four individual defendants. AstraZeneca filed its brief in response to Plaintiff's appeal on 14 October 2008.

AstraZeneca PLC will continue to vigorously defend itself in this matter.

**INFORMAL US SECURITIES AND EXCHANGE COMMISSION (SEC) INQUIRY**

In October 2006, AstraZeneca received from the SEC a letter requesting documents related to its business activities in Italy, Croatia, Russia and Slovakia for the period 1 October 2003 to the present. The SEC's request generally seeks documents concerning any payments to doctors or government officials and related internal accounting controls. The request also seeks policies, correspondence, audits and other documents concerning compliance with the Foreign Corrupt Practices Act, as well as any allegations or communications with prosecutors' offices relating to corruption or bribery of doctors or government officials. AstraZeneca has produced documents in response to this request. It is not currently possible to predict the outcome of this inquiry.

**ANTI-TRUST**

In January 2008 AstraZeneca, together with several other companies, was the subject of an unannounced inspection simultaneous with the launch by the EU Commission (Commission) of a Sectoral Inquiry (Inquiry) into the pharmaceutical industry. The Inquiry relates to the introduction of innovative and generic medicines and covers commercial and other practices, including the use of patents. On 28 November 2008 the Commission published its preliminary report. The report does not identify wrongdoing by any individual companies but is stated to provide a factual basis for further consideration. The Commission has stated that it will commence individual investigations where there are indications that competition rules have been breached. The preliminary report focuses on a number of issues relating to competition in the EU, referring to strategies which the Commission believes pharmaceutical companies use to block or delay generic entry. Such strategies include: patent filings and enforcement; patent settlement agreements and other agreements; interventions before national regulatory authorities; and life-cycle management strategies.

A final report is expected in Spring 2009. AstraZeneca has been co-operating fully with the Commission and participating in European Federation for Pharmaceutical Industries and Associations activities.

**OTHER**

The Company has guaranteed the external borrowing of a subsidiary, in the amount of \$288m.

**8 STATUTORY AND OTHER INFORMATION**

There are no employees of the Company (2007: nil). The Directors of the Company were paid by another Group company in 2008 and 2007.

# 172 GROUP FINANCIAL RECORD

For the year ended 31 December	2004 \$m	2005 \$m	2006 \$m	2007 \$m	2008 \$m
<b>Revenue and profits</b>					
Revenue	21,426	23,950	26,475	29,559	<b>31,601</b>
Cost of sales	(5,193)	(5,356)	(5,559)	(6,419)	<b>(6,598)</b>
Distribution costs	(177)	(211)	(226)	(248)	<b>(291)</b>
Research and development	(3,467)	(3,379)	(3,902)	(5,162)	<b>(5,179)</b>
Selling, general and administrative costs	(8,268)	(8,695)	(9,096)	(10,364)	<b>(10,913)</b>
Other operating income and expense	226	193	524	728	<b>524</b>
Operating profit	4,547	6,502	8,216	8,094	<b>9,144</b>
Profit on sale of interest in joint venture	219	—	—	—	—
Finance income	532	665	888	959	<b>854</b>
Finance expense	(454)	(500)	(561)	(1,070)	<b>(1,317)</b>
Profit before tax	4,844	6,667	8,543	7,983	<b>8,681</b>
Taxation	(1,161)	(1,943)	(2,480)	(2,356)	<b>(2,551)</b>
Profit for the period	3,683	4,724	6,063	5,627	<b>6,130</b>
Attributable to:					
Equity holders of the Company	3,664	4,706	6,043	5,595	<b>6,101</b>
Minority interests	19	18	20	32	<b>29</b>
<b>Earnings per share</b>					
Earnings per \$0.25 Ordinary Share (basic)	\$2.18	\$2.91	\$3.86	\$3.74	<b>\$4.20</b>
Earnings per \$0.25 Ordinary Share (diluted)	\$2.18	\$2.91	\$3.85	\$3.73	<b>\$4.20</b>
Dividends	\$0.835	\$1.025	\$1.410	\$1.750	<b>\$1.900</b>
<b>Return on revenues</b>					
Operating profit as a percentage of revenues	21.2%	27.2%	31.0%	27.4%	<b>28.9%</b>
<b>Ratio of earnings to fixed charges</b>					
<b>At 31 December</b>					
Balance sheet	2004 \$m	2005 \$m	2006 \$m	2007 \$m	2008 \$m
Property, plant and equipment, goodwill and intangible assets	11,147	9,697	11,657	29,649	<b>29,240</b>
Other investments	262	256	119	182	<b>156</b>
Deferred tax assets	1,218	1,117	1,220	1,044	<b>1,236</b>
Current assets	13,025	13,770	16,936	17,082	<b>16,152</b>
Total assets	25,652	24,840	29,932	47,957	<b>46,784</b>
Current liabilities	(6,587)	(6,839)	(9,447)	(15,187)	<b>(13,320)</b>
Non-current liabilities	(4,568)	(4,310)	(5,069)	(17,855)	<b>(17,404)</b>
Net assets	14,497	13,691	15,416	14,915	<b>16,060</b>
Share capital	411	395	383	364	<b>362</b>
Reserves attributable to equity holders	13,993	13,202	14,921	14,414	<b>15,550</b>
Minority equity interests	93	94	112	137	<b>148</b>
Total equity and reserves	14,497	13,691	15,416	14,915	<b>16,060</b>
<b>For the year ended 31 December</b>					
Cash flows	2004 \$m	2005 \$m	2006 \$m	2007 \$m	2008 \$m
Net cash inflow/(outflow) from:					
Operating activities	4,817	6,743	7,693	7,510	<b>8,742</b>
Investing activities	970	(1,182)	(272)	(14,887)	<b>(3,896)</b>
Financing activities	(2,761)	(4,572)	(5,366)	6,051	<b>(6,362)</b>
	3,026	989	2,055	(1,326)	<b>(1,516)</b>

## RATIO OF EARNINGS TO FIXED CHARGES

For the purpose of computing these ratios, earnings consist of the income from continuing ordinary activities before taxation of Group companies and income received from companies owned 50% or less, plus fixed charges. Fixed charges consist of interest on all indebtedness, amortisation of debt discount and expense and that portion of rental expense representative of the interest factor.



**REMUNERATION REPORT**



"We have included in our work during 2008 an extensive benchmarking of the activities and policies of the Remuneration Committee to assess how these conform with the continuous advance in best practice in these areas. Our objective in this work, as in all our work, is to ensure that AstraZeneca's remuneration strategy supports its business strategy, and thereby serves shareholders."

**JOHN VARLEY**  
Chairman of the Remuneration Committee

This Directors' Remuneration Report has been prepared in accordance with the Directors' Remuneration Report Regulations 2002 (the Regulations) and meets the relevant requirements of the Financial Services Authority's (FSA) Listing Rules. As required by the Regulations, a resolution to approve the report will be proposed at the Annual General Meeting (AGM) on 30 April 2009.

The following sections of the Directors' Remuneration Report up to and including the section titled 'Non-Executive Directors' on page 181 were not subject to audit by KPMG Audit Plc.

## REMUNERATION COMMITTEE MEMBERSHIP AND MEETINGS

The members of the Remuneration Committee are John Varley (Chairman of the Committee), John Buchanan, Louis Schweitzer and Nancy Rothwell. They are all Non-Executive Directors. The Board considers them all to be independent (Louis Schweitzer was considered independent upon his appointment as Chairman of the Board; in accordance with the UK Combined Code on Corporate Governance, the test of independence is not appropriate in relation to the Chairman after his appointment). The independence of the Non-Executive Directors is discussed in more detail in the Directors' Report on page 92. The Company Secretary acts as the secretary to the Remuneration Committee.

The Remuneration Committee met seven times in 2008. Each meeting was attended by all of its members, except that other commitments prevented John Buchanan from attending the meetings on 30 January 2008, 18 March 2008 and 10 December 2008. Nancy Rothwell was also unable to attend the meeting on 18 March 2008. Other commitments prevented Louis Schweitzer from attending the meeting on 10 December 2008.

At the request of the Remuneration Committee, the Chief Executive Officer and certain senior managers were invited to attend meetings of the Remuneration Committee throughout the year. Accordingly, the following attended meetings of the Remuneration Committee in 2008, except where their own remuneration was being discussed: David Brennan (Chief Executive Officer); Lynn Tetrault (Executive Vice-President, Human Resources and Corporate Affairs); and Simon Appleby (Vice-President, Performance and Reward). These individuals provided advice and services that materially assisted the Remuneration Committee during the year. In so doing, they drew on various sources of data concerning directors' and executives' salaries, bonus levels and other incentives including general pharmaceutical industry reports and surveys, as well as surveys specifically carried out for the Company, such as those prepared by Towers Perrin.

During 2008, Carol Arrowsmith of Deloitte LLP (Deloitte) was retained by the Remuneration Committee to provide it with independent advice on all matters being considered by it. Deloitte also provided taxation advice and other non-audit services to the Company.

## REMUNERATION COMMITTEE REMIT AND KEY ACTIVITIES DURING THE YEAR

A copy of the Remuneration Committee's remit is available on the Company's website, [astrazeneca.com](http://astrazeneca.com), or by request from the Company Secretary.

### KEY ACTIVITIES DURING THE YEAR

The Remuneration Committee considered the following matters, amongst other things, during 2008:

- > The terms of senior executives' packages on appointment, promotion and termination.
- > As part of a benchmarking of the Committee's activities and policies, a review of the Company's compliance with institutional investor guidelines.
- > A review of guiding principles that inform the Company's approach to total reward arrangements to ensure that the remuneration strategy supports the business strategy.
- > Assessment of financial performance against earnings per share (EPS) targets to determine the level of payment of bonuses for 2007 and set EPS targets for 2008.
- > Prepared, reviewed and approved the Directors' Remuneration Report.
- > Approved the awards made under the Group's main incentive plans (Performance Share Plan and Share Option Plan) to Senior Executive Team (SET) members and other selected participants.
- > Developed long-term incentive (LTI) arrangements for a number of subsidiary businesses which contribute towards specific Group strategic and commercial objectives.
- > Reviewed LTI arrangements in the light of age discrimination legislation.
- > Proposed remuneration and incentive arrangements to support senior level recruitment.

## ASTRAZENECA'S OVERALL REMUNERATION POLICY AND PURPOSE

1. The role of the Remuneration Committee is to help the organisation to create value for shareholders over time through the development and deployment of remuneration policies and practices that support the implementation of the business strategy.
2. The Board is committed to maintaining a dynamic performance culture, in which the Group can compete strongly by employing and developing the best talent, and where every employee is clear about the Group's objectives, how their work will impact on those objectives and how they will benefit from achieving high levels of performance.
3. To underpin these objectives, in addition to fixed remuneration which comprises basic pay, pension, and certain other benefits and which is benchmarked against appropriate external comparators, the majority of employees are eligible to receive an annual cash incentive. This incentive is determined by reference to corporate, team and individual performance. The component based on corporate financial performance is in the form of EPS. Whilst details of bonus plans differ from country to country, the EPS component ensures that all eligible employees receive an element of reward based on the Company's overall financial performance. In addition, LTI awards are provided to selected senior employees in order to align their interests closely with those of the Company's shareholders.
4. Pay for performance principles apply throughout the Group and provide a consistent framework within which executive remuneration decisions are made.
5. The Remuneration Committee has responsibility for determining the individual compensation paid to the Chief Executive Officer and members of the SET; and for the approval of any single payment or award over \$1,000,000.

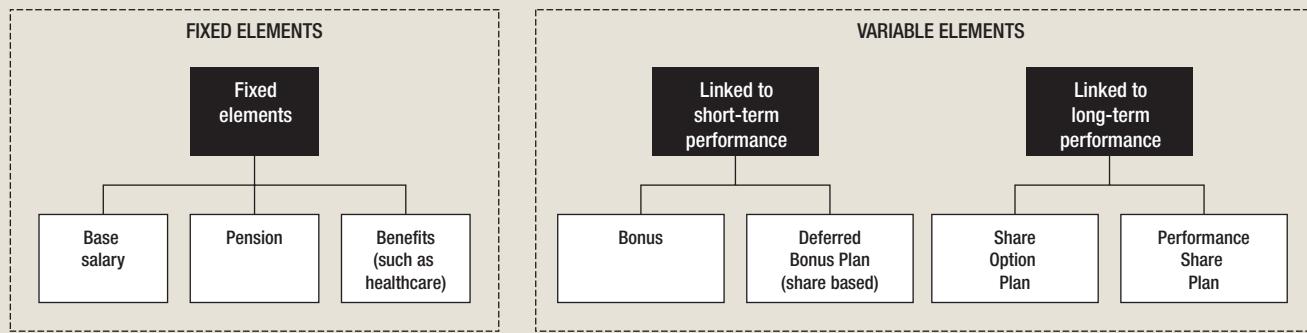
6. The Remuneration Committee seeks to ensure that the overall proportion of variable pay (bonuses and share-based awards) to which Directors and members of the SET may become entitled form a significant part of their overall remuneration opportunity. The Remuneration Committee's objective is to ensure that such variable pay is linked to a range of measures designed to promote both individual and team behaviour and performance in a way that supports the success of AstraZeneca and creates value for shareholders. Such measures are designed to be stretching and challenging to the relevant individuals.
7. The Group's overall remuneration policy and purpose is to:
  - > Attract and retain people of the quality necessary to sustain AstraZeneca as one of the best pharmaceutical companies in the world.
  - > Enable AstraZeneca to employ the best people and to develop the best talent by recognising and rewarding superior performance.
  - > Motivate these people in order to achieve the level of performance necessary to create sustained growth in shareholder value through time.
  - > Align the interests of employees with those of shareholders.
  - > Align individual and team reward with business performance at each level.
  - > Encourage employees to perform to their fullest capacity.
  - > Create pay structures that are fair, equitable and internally consistent.
  - > Ensure that pay structures are both competitive and cost effective in each of the relevant employment markets.
  - > Ensure proper balance of fixed and variable performance-related pay.

## COMPONENTS OF REMUNERATION

During 2008, the components of employee remuneration (including that of the Executive Directors and SET members) comprised fixed and variable (ie performance-related) elements, as set out below.

- > Annual salary – based on conditions in the relevant geographic market and the value of an individual's sustained personal performance to the business, resulting from their ability and experience.
- > Pension arrangements – appropriate to the relevant national market.
- > Benefits (such as healthcare) – cost-effective and compatible with relevant welfare arrangements.
- > Short-term bonus – a lump sum payment related to the targeted achievement of corporate, functional and individual goals, measured over a year and contained within a specific plan. The corporate goals are derived from the annual financial targets set by the Board and take into account external expectations of performance. The functional goals are agreed by the Remuneration Committee at the start of the year. These functional goals are derived from the Business Scorecard, the key elements of which are set out in the strategy, goals and performance measurement table on page 12, and are monitored thereafter as part of a Quarterly Business Review. Individual goals are based on annual objectives, which are linked to functional goals.
- > LTI arrangements – for selected groups, targeted at the achievement of strategic objectives closely aligned with the interests of shareholders, namely the AstraZeneca Performance Share Plan (PSP) described on page 179, and the AstraZeneca Share Option Plan described on page 180, and in line with market practice. Some individuals (primarily those based in the US, but excluding Executive Directors) participate in the Restricted Stock Unit Award Plan described on page 180.
- > Share participation – various plans provide the opportunity for employees to take a personal stake in the Company's wealth creation as shareholders. These plans are described in Note 24 to the Financial Statements.

## COMPONENTS OF REMUNERATION – FIXED AND VARIABLE



The way in which these elements of remuneration were combined and applied varied according to a range of factors including specific business needs and practices in different geographic markets, although, in general, the more senior the role within the business, the greater the proportion of total remuneration was made up from variable pay.

Components of remuneration are taken into account both separately and in their totality in judging the value of a package. For 2009, the Company will continue to benchmark against appropriate comparator companies and will assess whether or not and to what extent the overall opportunities for remuneration offered by the current structure of remuneration remain appropriate in the context of changes within the business and the external environment in which it operates.

Recognising that shareholder approval to operate the AstraZeneca Share Option Plan will expire at the end of its 10-year life during 2010, and that it will be necessary to seek further shareholder approval in order to continue operating the plan beyond this date, the Remuneration Committee intends to consider whether or not the Company's established remuneration policy and the operation of the existing incentive plans continue to meet the needs of the business in securing key senior executive talent to grow shareholder value. This will build on a review of remuneration policy started during 2008. To the extent that any material changes are to be proposed as a consequence of this review, the Remuneration Committee will consult with shareholders in advance of next year's AGM.

### EXECUTIVE DIRECTORS' AND SENIOR EXECUTIVE TEAM'S REMUNERATION AND TERMS OF EMPLOYMENT

#### ILLUSTRATION OF FIXED AND VARIABLE REMUNERATION

Based on AstraZeneca's remuneration policy, the charts on page 177 illustrate the potential weighting given to fixed and variable elements of the remuneration package at Executive Director level. Performance-related elements of the package are shown on an 'Expected Value' basis, and in the event that performance conditions are not met, such elements would not deliver any value. The 'Expected Value' approach considers the range of possible outcomes and the probability attached to each, in order to provide a value that represents the average that would be delivered if the arrangements were operated over many years. The 'Expected Value' for bonus payment is taken to be the target payout level.

#### FIXED REMUNERATION

All Executive Directors' terms and conditions are UK-based, apart from David Brennan's pension and health insurance arrangements, which are described below.

#### Basic salary

The basic salary for each Executive Director and SET member is determined by the Remuneration Committee. Recognising the external economic environment, the Remuneration Committee did not increase the salaries of Executive Directors or other members of the SET for 2009, other than in respect of situations where additional responsibilities had been taken on. Salary decisions reflect the experience and sustained performance of the individuals to whom they apply, taking account of market competitiveness and the level of increases applicable to employees in the wider Group. For the Executive Directors and other members of the SET, the policy has been to position salaries at or slightly above the median of the relevant market.

For 2009, the Executive Directors' annual salaries are on page 177.

#### Pension arrangements

The table on page 183 gives details of the changes in the value of the Executive Directors' accrued pensions during 2008.

#### US Executive Directors' pension arrangements

David Brennan is a member of the AstraZeneca US Defined Benefit Pension Plan, by virtue of his membership of pension plans applicable to legacy Astra Merck employees. Benefits for members of this plan are delivered on a tax-qualified basis, with accrued benefits that exceed specific limits under the plan's formula and the US Tax Code being delivered through a supplementary, non-qualified plan. The normal pension age under both plans is 65.

As previously disclosed, in September 2008, David Brennan satisfied a condition in the pension plan relating to combined age and service exceeding 85 years, which is a condition that applies to all members within the pension plan. On leaving or retiring from employment, he is eligible to take a pension or lump sum equivalent based on accrued service and final pensionable pay (ie without actuarial reduction). This change in status under the pension plan triggered an increase in transfer value during 2008.

David Brennan's participation in the pension plan is subject to a service cap at 35 years service, which will be attained in January 2011, after which no further service accrual can be earned.

Members and, in the event of death, surviving spouses/dependants can elect to take pensions in lump sum form based on actuarial valuation.

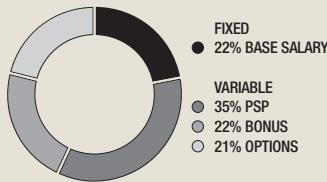
## EXECUTIVE DIRECTORS' SALARIES 2009

Executive Director	Annual salary in 2008 £	Annual salary in 2009 £	% Increase
David Brennan	972,900	972,900	0
John Patterson <sup>1</sup>	540,000	540,000	0
Simon Lowth	550,000	550,000	0

<sup>1</sup> John Patterson will retire from the Board on 31 March 2009.

## COMPONENTS OF REMUNERATION – EXPECTED VALUE BASIS

## CHIEF EXECUTIVE OFFICER



In addition, David Brennan is a contributing member of the US 401(k) savings plan<sup>2</sup>, as applies to all US employees.

In the event of a US participant becoming incapacitated then permanent health insurance cover will provide continuation of a proportion of salary, subject to the satisfaction of certain medical criteria.

## UK Executive Directors' pension arrangements

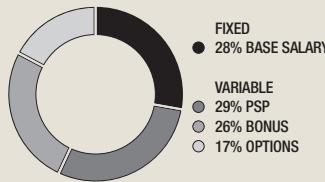
UK Executive Directors have the option to participate in the UK Pension Fund according to their eligibility, or to take a cash allowance in lieu of pension. The cash allowance is consistent with the appropriate value of the alternative gross pension benefit.

John Patterson (Executive Director, Development) elected to take the cash allowance in lieu of pension for the option year 2008/2009 (as detailed in the pensions table on page 183).

In respect of pension accrued up to that point he remains a member of the AstraZeneca main UK defined benefit pension plan. The normal pension age under this plan is 62. However, a member's accrued pension is available from age 60 without any actuarial reduction. John Patterson, having reached age 60 in January 2008, on retiring on 31 March 2009, will be eligible to take a pension based on accrued service and final pensionable pay.

On death in retirement, the accrued pension is guaranteed payable for the first five years of retirement and then reduces to two-thirds of this amount should there be a surviving spouse or other dependant. Any member may choose higher or lower levels of survivor's pensions at retirement, subject

## EXECUTIVE DIRECTOR



to HM Revenue & Customs limits, in return for an adjustment to their own pension of equivalent actuarial value. Pensions are also payable to dependent children.

Pensions in payment are increased annually in line with inflation, as measured by the UK Retail Prices Index, up to a maximum of 5%.

Simon Lowth (Chief Financial Officer) is eligible to join AstraZeneca's main UK defined contribution pension plan at a Company contribution rate of 24% of annual basic salary, or alternatively, to take the Company contribution as a cash allowance. For the option year 2008/2009, he has elected to take the cash allowance (as detailed in the pensions section on page 183).

In the event of a senior employee in the main UK defined benefit pension plan becoming incapacitated, then a pension is payable immediately as if such person had reached normal retirement age (subject to a maximum of 10 years' additional service), based on current pensionable salary. In the event of a member's death prior to retirement, dependants are entitled to a pension of two-thirds of the pension that would have been earned had the deceased remained in service to age 62, plus a capital sum of four times pensionable pay.

In the event of a senior employee in the main UK defined contribution pension plan (or where an alternative cash allowance has been taken) becoming incapacitated, then permanent health insurance cover provides continuation of a proportion of salary subject to the satisfaction of certain medical criteria. In the event of death prior to retirement, dependants are entitled to a pension and/or lump sum secured from a multiple of ten times salary.

## Benefits

In conjunction with the majority of employers, certain benefits are made available to the Executive Directors and members of the SET via local benefits programmes offered by AstraZeneca. Benefits under these programmes typically include health care, insurances and facilitated car purchase arrangements.

## VARIABLE REMUNERATION

Executive Directors and members of the SET are eligible to participate in a number of different elements of variable pay, which are described below. The decision as to whether or not in any given year the Executive Directors and members of the SET receive any or all of their elements of variable pay is determined by the Remuneration Committee, which will typically have regard to the performance of the individual and will consider the elements of variable pay applicable to senior employees in other comparable organisations in making such a determination.

## Short-term bonus

## Performance criteria

All Executive Directors and members of the SET are eligible for a short-term bonus. The basis for the payment of any short-term bonus is determined by reference to a range of factors linked to the underlying performance of AstraZeneca's business, the performance of the functional area for which the individual is responsible and the performance of the individual in his or her role.

## Structure and assessment of performance

The annual bonus for Executive Directors and members of the SET is based on performance criteria linked to the following targets:

- > 50% by reference to EPS targets set at the start of the financial year;
- > 25% by reference to measures and initiatives as set out in, or derived from, the strategy, goals and performance measurement table on page 12 relevant to the individual's functional accountability (or, in the case of the Chief Executive Officer, the average of these individual outcomes); and
- > 25% by a balance of qualitative and quantitative objectives that address overall business performance, the key elements of which are set out in the strategy, goals and performance measurement table on page 12.

<sup>2</sup> The 401(k) savings plan is a qualified plan to which eligible employees may make salary-deferral contributions on a post-tax and/or pre-tax basis. Employers may also make matching or non-elective contributions to the plan. There is a supplementary non-qualified plan in place for all eligible employees whose earnings exceed specific limits.

Following a review by the Remuneration Committee, it has been agreed that the performance criteria for the determination of annual bonus for Executive Directors and members of the SET for bonus year 2009 will be adjusted to align with the current objectives and measures that are used by the business as follows:

- > 60% by reference to a group of Corporate objectives comprising: EPS and cash flow targets, together with objectives in each of the strategic priority areas identified by the Board for the business, the key elements of which are set out in the strategy, goals and performance measurement table on page 12; and
- > 40% by reference to individual measures and initiatives which link to the business objectives relevant to the individual's functional accountability (or, in the case of the Chief Executive Officer, the average of these individual outcomes).

These changes will further enhance AstraZeneca's emphasis on individual and business accountability. The key measures referred to above are clearly set out in the strategy, goals and performance measurement table described on page 12, whereby Group and Functional objectives and measures are managed in a robust and consistent way and assessed by the SET as part of a Quarterly Business Review. The outcome of this process is rigorously scrutinised by the Board.

#### Bonus ranges for 2009

For 2009, the bonus ranges for each Executive Director are shown below and are the same as for 2008.

#### BONUS RANGES FOR 2009

Executive Director	Bonus range for 2009
David Brennan	0 – 180
John Patterson <sup>1</sup>	0 – 150
Simon Lowth	0 – 150

<sup>1</sup> John Patterson's bonus for 2009 will be considered by the Remuneration Committee in January 2010, when performance outcomes are known and, to the extent that any bonus is payable, will be based on his eligible earnings for the period in 2009 prior to retirement.

#### BONUS OUTCOMES FOR 2008

Executive Director	Short-term bonus (delivered as a combination of cash and shares, as shown in the table of emoluments) <sup>1</sup>	Percentage of salary
David Brennan	1,295	133
John Patterson	522	97
Simon Lowth	704	128

<sup>1</sup> Bonuses for Executive Directors are not pensionable.

#### Bonus outcomes for 2008

Bonus outcomes for 2008 reflected performance in respect of EPS, together with overall business and financial outcomes and relevant functional performance against clear measures and initiatives in support of the strategic priorities and business objectives, the key elements of which are set out in the strategy, goals and performance measurement table on page 12, in relation to the following categories which are consistent with delivering shareholder value:

- > Strengthen the pipeline.
- > Grow the business.
- > Reshape the business.
- > Promote a culture of responsibility and accountability.

The bonus outcomes for the Executive Directors for 2008 are shown in the table below.

In respect of the assessment of bonuses for 2008, EPS (excluding restructuring and synergy costs), global sales and operating profit (excluding restructuring and synergy costs) were taken into account in particular by the Remuneration Committee, which also noted growth in the share price and relative total shareholder return (TSR) performance.

The Remuneration Committee also noted that the development pipeline now comprises 98 clinical projects. The Phase III portfolio remained constant with 10 projects. We delivered 32 FGLPs and delivered 17 first time in man. Good progress was made in product development life-cycle management with eight significant submissions across a number of jurisdictions, and two product submissions.

These achievements were underpinned by a continuing emphasis on cost discipline, improved productivity and performance management. Having assessed the Company's performance as set out above, the Remuneration Committee is satisfied that the bonus payments that have been earned against stretching performance targets that were set at the start of the year are fully justified.

#### Bonus share deferral requirements

Consistent with best practice, the Remuneration Committee has put in place a requirement that a certain proportion of any short-term bonus payment be deferred and invested into Ordinary Shares or American Depository Shares (ADSs) in the Company acquired on the open market at the prevailing market price and held on behalf of individual Executive Directors and SET members by the Company for a period of three years from the date of acquisition. This arrangement is one of the ways in which, over time, Executive Directors and members of the SET will be able to build up a significant shareholding in the Company. Although the delivery of these shares to the individual after three years is not contingent on the continued performance of the Company, the Remuneration Committee has reserved the right to retrospectively alter bonus outcomes in circumstances where it does not consider that the delivery of shares is warranted by the underlying performance of the business. The proportion currently deferred into shares is one third of the pre-tax bonus for Executive Directors and one sixth for all other SET members. On leaving, participants would normally have to wait for the shares to be released at the end of the three-year period.

#### Long-term incentive plans

Executive Directors and members of the SET may also be granted share options under the AstraZeneca Share Option Plan and awards under the AstraZeneca Performance Share Plan. The grant of such options and award of such shares are determined by the Remuneration Committee, as are the performance targets that apply to their vesting and/or exercise. Both of these schemes are intended to align the interests of Executive Directors and members of the SET with those of shareholders. Following the exercise of an option under the AstraZeneca Share Option Plan it is the expectation of the Remuneration Committee that Executive Directors and members of the

SET will retain the net number of shares from the exercise for a period of not less than six months from the date of exercise.

#### Shareholding guidelines

For Executive Directors and members of the SET, the Remuneration Committee has established target shareholding guidelines, under which it is expected that they build up their own holding of shares in the Company, equivalent to their basic salary. It is expected that these shareholding targets will be reached in part through shares delivered from the various LTI arrangements as well as the deferred part of the short-term bonus (described above).

#### AstraZeneca Performance Share Plan

The AstraZeneca PSP was approved by shareholders at the AGM in 2005 and provides for the grant of performance share awards (Awards) over Ordinary Shares or ADSs in AstraZeneca PLC (together, the Shares).

#### Basis of participation

The Remuneration Committee is responsible for setting the policy for the way in which the PSP should be operated, including agreeing performance targets, identifying which employees should be invited to participate in the PSP and the level of Awards. Participation is highly selective and tends only to include senior employees on the basis of their performance. Awards are not pensionable and may not generally be assigned or transferred.

Generally, Awards can be granted at any time (although in practice they are awarded annually), but not during a close period of the Company. In 2008, the main grant of Awards was made on 28 March, with other awards approved by the Remuneration Committee in relation to, for example, new appointments or promotions granted on 22 August. The value of the shares subject to the Award is determined by reference to the market price of Shares over the three-day period immediately preceding the date of grant.

Details of Awards to Executive Directors are shown in the table on page 186.

#### Performance conditions

Save in exceptional circumstances, which are prescribed in the PSP rules, the vesting of Awards is contingent on the satisfaction of specified performance targets and continued employment with the Group. In addition to the satisfaction of these performance targets, Awards will generally not vest until the third anniversary of the date of grant although Awards may vest in part on a time pro-rated basis where a participant ceases to be

in relevant employment under certain circumstances during the vesting period to the extent that the performance targets have been met.

#### Performance period and vesting dates

In the case of all Awards granted so far, the performance target relates to the three-year period commencing on 1 January of the year of grant. Thus, for the Awards made in 2008, the performance period runs from 1 January 2008 to 31 December 2010. The vesting date is the third anniversary of the date of grant.

#### Performance targets

For all Awards so far to Executive Directors and SET members, the performance target is the Company's TSR over the relevant three-year period compared with the TSR of a selected peer group of pharmaceutical companies for the same period. These companies are currently a total of 12: Abbott Laboratories, Bristol-Myers Squibb, Eli Lilly, GlaxoSmithKline, Johnson & Johnson, Merck, Novartis, Pfizer, Roche, Sanofi-Aventis, Schering-Plough and Wyeth.

TSR evaluates share price growth and dividends re-invested in respect of a notional number of shares, from the beginning of the relevant performance period to the end of it, and ranks the companies in the selected comparator group by reference to their TSR achieved over that period. The rank which the Company's TSR achieves over the performance period will determine how many Shares will vest under the relevant Award, as per the vesting schedule shown in the table below:

TSR ranking of the Company	Vesting percentage of Shares under Award %
Below median	0
Median	30
Upper quartile	100
Between median and upper quartile	Pro rata
Significantly above upper quartile	up to 125

To alleviate any short-term volatility, the return index is averaged in the TSR calculations for each company over the three months prior to the start and end of the relevant performance period.

In addition to the TSR performance target being met for each Award as set out above, the Remuneration Committee also has to satisfy itself that achievement of the TSR performance target is a genuine reflection of the Company's underlying financial performance and has the discretion to not

allow Awards to vest or to only allow them to partially vest where this appears to the Remuneration Committee to be warranted.

The Remuneration Committee has the discretion to award Shares up to a further 25% over and above the Shares subject to the Award, if the Company's TSR performance is substantially better than that of the upper quartile of the comparator group.

#### Individual limit

In respect of any financial year, the maximum market value of Shares that may be put under Award in respect of an employee is 500% of that employee's basic salary. This limit excludes the above 25% maximum additional Shares that may vest, at the sole discretion of the Remuneration Committee, if the Company's TSR performance is substantially above that of the upper quartile of the comparator group. For Awards to vest at this level, the Company would need to have sustained a level of performance well in excess of upper quartile over a period of years and the Remuneration Committee would need to be satisfied that this was warranted.

The actual individual limits that apply under the PSP, subject to this maximum, are set by the Remuneration Committee from time to time.

#### Performance under the AstraZeneca Performance Share Plan in 2008

The peer group graphs on page 184 show, for each Award, how the Company's TSR performance has compared with the TSR for the companies in the comparator group from the first day of the relevant performance period to 31 December 2008 and how the Company ranks against those other peer companies on this basis. We will continue to report on the performance of each Award against the relevant performance target during the relevant vesting period.

#### Change in control provisions

On a change in control of the Company as a result of a general offer to acquire the whole of the issued ordinary share capital of the Company, Awards will vest pro-rata to the time elapsed between the date of grant of the Award and the date of the change in control to the extent that the relevant performance targets have been met up to the date of the change in control (or the most practicable earlier date). The Remuneration Committee will, however, have discretion to take into account any other factors it believes to be relevant in determining the extent to which Awards will vest in these circumstances.

### AstraZeneca Share Option Plan

The AstraZeneca Share Option Plan (SOP) was approved by shareholders at the AGM in 2000 and provides for the grant of share option awards (Awards) over Ordinary Shares or ADSs in AstraZeneca PLC (together, the Shares).

This plan was approved for a period of 10 years. Recognising this, the Company intends to begin the process of consulting with key institutional shareholders during 2009 in relation to any proposal to adopt a new plan for 2010.

#### Basis of participation

The Remuneration Committee is responsible for setting the policy for the way in which the SOP should be operated, including agreeing performance targets and identifying which employees should be invited to participate and the level of Awards. Participation is highly selective and tends only to include senior employees on the basis of their performance (except in the US where for cultural reasons, participation in the SOP is more widespread). Awards are not pensionable and may not generally be assigned or transferred.

Generally, Awards can be granted at any time, but not during a close period of the Company. In 2008, grants of Awards were made on 28 March and 22 August. The exercise price is fixed by reference to the market price of Shares over the three-day period immediately preceding the date of grant.

Details of Awards to Executive Directors are shown in the table on page 187.

#### Performance conditions

The AstraZeneca SOP, in particular, requires the Remuneration Committee, before agreeing to grant an Award to Executive Directors and others, to consider whether or not the underlying performance of the Company justifies a grant. In addition, it must also be satisfied that each individual nominated is performing to the necessary standard.

In agreeing grants of Awards in 2008, the Remuneration Committee took into account strong underlying financial performance and progress towards achieving longer-term goals.

As well as taking into account these performance considerations at the point of granting Awards, the Remuneration Committee imposed performance conditions in respect of the exercise of such Awards in respect of members of the SET (including the Executive Directors) which, in the view of the Remuneration Committee were considered appropriately stretching. In order for Awards to vest, the EPS of the Group must increase at least in line with the UK Retail Price Index plus 5% per annum on average, over a three year period, the base figure being the EPS for the financial year preceding the date of grant, with no re-testing. In addition, since the review of executive remuneration in 2004, the Remuneration Committee has included a condition that, if an event occurs which causes material reputational damage to the Company, such that it is not appropriate for the Awards to vest and become exercisable, the Remuneration Committee can make a determination to reflect this.

The Remuneration Committee also sought and received assurances that each individual proposed for the grant of an Award has been performing in a manner that justified a grant to them. There was some variation in the level of grants being proposed between individuals, to reflect differing levels of performance and their seniority within the business.

#### Change in control provisions

On a change in control of the Company as a result of a general offer to acquire the whole of the issued ordinary share capital of the Company, any unvested Awards vest immediately following the change in control. All outstanding vested Awards can be exercised during the period of six months from the date of the change in control. The Company will use its best endeavours to ensure that any shares acquired from an exercise following a change in control are subject to the same terms as shares of the same class were acquired under the general offer. Unexercised Awards will lapse at the end of the six-month period following a change in control or, if the Award is exchanged for an option relating to shares in a different company, the date of exchange, whichever is earlier.

#### Dilution

The dilutive effect of the grants of Awards on the Company's issued share capital was also considered by the Remuneration Committee, in accordance with its commitment, reflecting the guidance of the Association of British Insurers, that the percentage of the issued share capital that could be allocated under all of the Company's employee share plans over a period of 10 years should be under 10%. This commitment is applied by the Remuneration Committee in practice as a limit, on average, of under 1% per annum. The Remuneration Committee concluded that a grant of Awards to those plan participants and individual Executive Directors proposed for a grant was appropriate given the level of performance achieved. None of the other LTI arrangements currently operated by the Company have a dilutive effect because they do not involve the issue and allotment of new Shares or ADSs in the Company but rather rely on the market purchase of Shares or ADSs that have already been issued.

### Zeneca 1994 Executive Share Option Scheme

This plan was replaced by the AstraZeneca SOP. The last grant of options under this plan was in March 2000. Certain Executive Directors and members of the SET have options outstanding under this plan, all of which are exercisable, the performance conditions having been satisfied. A description of this plan can be found on page 142.

#### Other plans

In addition to the plans described above, the Company operates a Share Incentive Plan and a Savings-Related Share Option Plan, both of which are UK HM Revenue & Customs approved plans. Certain Executive Directors and members of the SET are eligible to participate in these plans, more detailed descriptions of which can be found on pages 139 and 142.

#### Restricted Stock Unit Plans

The AstraZeneca Pharmaceuticals LP Restricted Stock Unit Award Plan (RSU Plan) was introduced in 2007 and provides for the grant of restricted stock unit awards (Awards) to selected employees (predominantly in the US). The MedImmune, Inc. 2008 Restricted Stock Unit Award Plan (MedImmune RSU Plan) was introduced in 2008 to make awards to employees of MedImmune. The RSU Plan and MedImmune RSU Plan are used in conjunction with the AstraZeneca SOP to

provide a mix of restricted stock units and share options. Awards typically vest on the third anniversary of the date of grant and are contingent on continued employment with AstraZeneca. In 2008, Awards were made under these plans on 28 March and 22 August. Neither of these plans is used to make Awards to Executive Directors or SET members.

#### Restricted Share Plan

The AstraZeneca Restricted Share Plan was introduced in 2008 and provides for the grant of restricted share awards to key employees, excluding serving Executive Directors. Awards are made on an ad hoc basis with variable vesting dates. The plan has been used twice in 2008 to make awards to four employees. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated.

#### Service contracts

Details of the service contracts for each of the Executive Directors, including their notice periods, are set out below. The notice periods in the Executive Directors' service contracts are 12 months. It is the Board's intention that, in the event of early termination of an Executive Director's employment, any compensation payable under the service contract should not exceed the salary and benefits that would have been received had the contractual notice period been worked and this may be further reduced in line with the Executive Director's duty to mitigate losses. Compensation for any bonus entitlement will be assessed initially as 'on target' but subject to adjustment by the Remuneration Committee to take account of the particular circumstances of the termination.

#### Policy on external appointments and retention of fees

Subject to the specific approval of the Board in each case, Executive Directors and members of the SET may accept external appointments as non-executive directors of other companies and retain any related fees paid to them provided always that such external appointments are not considered by the Board to prevent or reduce the ability of the Executive to perform his or her role to the required standard. Such appointments are seen as a way in which Executives can gain a broader business experience and, in turn, benefit the Company.

John Patterson is a non-executive director of Cobham plc. In respect of such position, he retained the fees paid to him for his services which, in 2008, totalled £51,500.

#### Non-Executive Directors

None of the Non-Executive Directors has a service contract. They are not eligible for performance-related bonuses or the grant of share options. No pension contributions are made on their behalf. None of the Non-Executive Directors has participated or will participate in any decision made by the Board in relation to the determination of their own fees. In addition to the mandatory shareholding requirement imposed on all Directors under the Company's Articles of Association described on page 197, in December 2008 the Board agreed that each Non-Executive Director should also be encouraged to build up, over time, a shareholding in the Company with a value approximately equivalent to the basic annual fee for a Non-Executive Director (£60,000) or, in the case of the Chairman, approximately equivalent to his annual fee (£325,000).

The Chairman's and the Deputy Chairman's annual fees are £325,000 and £100,000 respectively, and the annual fees applicable to other Non-Executive Directors are set out below.

The remainder of this Report was subject to audit by KPMG Audit Plc.

#### AUDIT

The Directors' emoluments in 2008 and the details of the Directors' interests in the Company's Ordinary Shares disclosed in the Directors' Emoluments section on pages 182 to 188 have been audited by the Company's external auditor.

#### DETAILS OF EXECUTIVE DIRECTORS' SERVICE CONTRACTS AT 31 DECEMBER 2008

Executive Director <sup>1</sup>	Date of service contract	Unexpired term at 31 December 2008	Notice period
David Brennan	1 January 2006	12 months	12 months
John Patterson	1 January 2005	12 months	12 months
Simon Lowth	5 November 2007	12 months	12 months

<sup>1</sup> None of the Executive Directors has any provision in their service contracts giving them a right to liquidated damages or an automatic entitlement to bonus for the duration of their notice period.

#### NON-EXECUTIVE DIRECTORS' FEES

	£
Basic Fee	60,000
Senior Non-Executive Director	(an additional) 25,000
Membership of the Audit Committee or the Remuneration Committee	15,000
Chairman of the Audit Committee or the Remuneration Committee	(an additional) 20,000
Membership of the Science Committee	10,000
Chairman of the Science Committee	(an additional) 7,000

## DIRECTORS' EMOLUMENTS IN 2008

The aggregate remuneration, excluding pension contributions and the value of shares under option and shares subject to performance share plan awards, paid to or accrued for all Directors of the Company for services in all capacities during the year ended 31 December 2008 was £5.9m (\$11.1m). The remuneration of individual Directors is set out below in sterling and US dollars. All salaries, fees, bonuses and other benefits for Directors are established in sterling.

### DIRECTORS' REMUNERATION – STERLING

	Salary and fees £000	Bonuses		Taxable benefits £000	Other payments and allowances £000	Total 2008 £000	Total 2007 £000	Total 2006 £000
		Cash £000	Shares <sup>1</sup> £000					
Louis Schweitzer <sup>2</sup>	303	–	–	–	–	303	260	260
David Brennan	973	863	432	21	217 <sup>3</sup>	2,506	2,150	2,663
John Patterson	540	348	174	14	5 <sup>4,5</sup>	1,081	982	1,007
Simon Lowth	550	469	235	7	43 <sup>4</sup>	1,304	172	–
Bo Angelin <sup>2</sup>	63	–	–	–	–	63	21	–
John Buchanan <sup>2</sup>	96	–	–	–	–	96	69	69
Jean-Philippe Courtois <sup>2,6</sup>	58	–	–	–	–	58	–	–
Jane Henney <sup>2</sup>	76	–	–	–	–	76	57	57
Michele Hooper <sup>2</sup>	90	–	–	–	–	90	64	49
Rudy Markham <sup>7</sup>	23	–	–	–	–	23	–	–
Håkan Mogren <sup>2</sup>	100	–	–	–	–	100	100	100
Nancy Rothwell <sup>2</sup>	80	–	–	–	–	80	54	30
John Varley <sup>2</sup>	83	–	–	–	–	83	56	21
Marcus Wallenberg <sup>2</sup>	53	–	–	–	–	53	40	40
Former Directors	–	–	–	–	–	–	463	1,382
Total	3,088	1,680	841	42	265	5,916	4,488	5,678

<sup>1</sup> These figures represent that portion of the 2008 bonuses required to be deferred into shares to be held for a three-year period, as explained on page 178.

<sup>2</sup> Fees applicable to all Non-Executive Directors increased during the year, effective from the AGM on 24 April 2008. The revised fees are set out on page 181 of this Report.

<sup>3</sup> Relates to relocation allowances, a car allowance and cash payments in respect of dividends accrued on vesting of a 2005 US performance share plan award.

<sup>4</sup> Relates to remaining cash following selection of benefits within AstraZeneca's UK flexible benefits programme.

<sup>5</sup> Includes a deduction of £11,000 (\$21,000) in respect of member contributions to the AstraZeneca Defined Benefit Programme paid through salary sacrifice (see page 183).

<sup>6</sup> Part year only as appointed Director on 18 February 2008.

<sup>7</sup> Part year only as appointed Director on 12 September 2008.

### DIRECTORS' REMUNERATION – US DOLLARS

	Salary and fees \$000	Bonuses		Taxable benefits \$000	Other payments and allowances \$000	Total 2008 \$000	Total 2007 \$000	Total 2006 \$000
		Cash \$000	Shares <sup>1</sup> \$000					
Louis Schweitzer <sup>2</sup>	567	–	–	–	–	567	520	475
David Brennan	1,822	1,616	809	39	406 <sup>3</sup>	4,692	4,300	4,865
John Patterson	1,011	652	326	26	9 <sup>4,5</sup>	2,024	1,965	1,839
Simon Lowth	1,030	878	440	13	81 <sup>4</sup>	2,442	345	–
Bo Angelin <sup>2</sup>	118	–	–	–	–	118	42	–
John Buchanan <sup>2</sup>	180	–	–	–	–	180	138	126
Jean-Philippe Courtois <sup>2,6</sup>	109	–	–	–	–	109	–	–
Jane Henney <sup>2</sup>	142	–	–	–	–	142	114	104
Michele Hooper <sup>2</sup>	169	–	–	–	–	169	128	89
Rudy Markham <sup>7</sup>	43	–	–	–	–	43	–	–
Håkan Mogren <sup>2</sup>	187	–	–	–	–	187	200	183
Nancy Rothwell <sup>2</sup>	150	–	–	–	–	150	108	56
John Varley <sup>2</sup>	155	–	–	–	–	155	113	39
Marcus Wallenberg <sup>2</sup>	99	–	–	–	–	99	80	73
Former Directors	–	–	–	–	–	–	929	2,526
Total	5,782	3,146	1,575	78	496	11,077	8,982	10,375

<sup>1</sup> These figures represent that portion of the 2008 bonuses required to be deferred into shares to be held for a three-year period, as explained on page 178.

<sup>2</sup> Fees applicable to all Non-Executive Directors increased during the year, effective from the AGM on 24 April 2008. The revised fees are set out on page 181 of this Report.

<sup>3</sup> Relates to relocation allowances, a car allowance and cash payments in respect of dividends accrued on vesting of a 2005 US performance share plan award.

<sup>4</sup> Relates to remaining cash following selection of benefits within AstraZeneca's UK flexible benefits programme.

<sup>5</sup> Includes a deduction of \$21,000 (£11,000) in respect of member contributions to the AstraZeneca Defined Benefit Programme paid through salary sacrifice (see page 183).

<sup>6</sup> Part year only as appointed Director on 18 February 2008.

<sup>7</sup> Part year only as appointed Director on 12 September 2008.

In the tables on this page and on the previous page, salaries have been converted between sterling and US dollars at the average exchange rate for the year in question. These rates were:

	GBP/USD
2006	0.547
2007	0.500
2008	0.534

The Executive Directors were also granted options to subscribe for Ordinary Shares and awards of Ordinary Shares under the Company's long-term incentive arrangements (the AstraZeneca Share Option Plan and the AstraZeneca Performance Share Plan). Details of share options granted to, and exercised by, Directors and the aggregate of gains realised on the exercise of options, and of awards under the long-term incentive plans, in the year are given on pages 185 to 188.

No Director has a family relationship with any other Director.

## PENSIONS

### DEFINED BENEFIT ARRANGEMENTS

Pensions are payable to Directors in sterling, with the exception of David Brennan's, whose pension is payable in US dollars. For ease of understanding, the table below has been presented in both sterling and US dollars using the exchange rates for 2008 set out on the previous page.

	David Brennan £000	John Patterson £000	David Brennan \$000	John Patterson \$000
<b>Defined Benefit Arrangements</b>				
1. Accrued pension at 1 January 2008	611	335	1,145	627
2. Increase in accrued pension during year as a result of inflation	–	17	–	32
3. Adjustment to accrued pension as a result of salary increase relative to inflation	57	7	107	13
4. Increase in accrued pension as a result of additional service	12	6	23	11
5. Accrued pension at 31 December 2008	680	365	1,275	683
6. Employee contributions during 2008	–	–	–	–
7. Transfer value of accrued pension at 31 December 2007	5,325	6,833	9,973	12,797
8. Transfer value of accrued pension at 31 December 2008	9,313	8,288	17,441	15,521
9. Change in transfer value during the period less employee contributions	3,988	1,455	7,468	2,724
10. Age at 31 December 2008	55½	60½	55½	60½
11. Pensionable service (years) as at 31 December 2008	33	33½	33	33½

### Notes

- > For John Patterson, transfer values are calculated on the market related basis used by the AstraZeneca UK Pension Plan, in line with the GN11 guidance note published by the Board for Actuarial Standards in the UK. The basis was reviewed during 2008 and this resulted in an increase in his transfer value of £993,000 (\$1,860,000).
- > For David Brennan, transfer values are calculated to be consistent with the value of the lump sum distribution equivalent to his deferred accrued pension annuity. The minimum permissible value of such a lump sum distribution was modified in 2008.
- > As described on page 176, David Brennan reached age 55 during 2008 at which point he became entitled to receive his benefits immediately on retirement without reduction for payment before normal pension age. This results in a recalculation of his transfer value, which is reflected in this table for 2008. The figures shown above reflect David Brennan's participation in the AstraZeneca US Defined Benefit Pension Plan (qualified and non-qualified pension plans).
- > For John Patterson, member contributions of £11,000 (\$21,000), being 4% of pensionable salary for the first half of 2008 before he opted for cash in lieu, are paid through salary sacrifice, and as such no employee contributions are shown above or included within emoluments.

### DEFINED CONTRIBUTION ARRANGEMENTS

In addition to the defined benefit arrangements above for David Brennan, an employer matching contribution of £49,000 (\$91,000) was made to his 401(k) plan and associated non-qualified plan during 2008.

In addition to the defined benefit arrangements described above for John Patterson, as described on page 177, he has chosen to receive a cash allowance in lieu of pension, which during the second half of 2008 amounted to £84,000 (\$157,000).

Simon Lowth joined the Board on 5 November 2007. As described on page 177, he has chosen to receive a cash allowance in lieu of pension, which during 2008 amounted to £132,000 (\$247,000).

## TRANSACTIONS WITH DIRECTORS

There were no material recorded transactions between the Company and the Directors during 2008 or 2007.

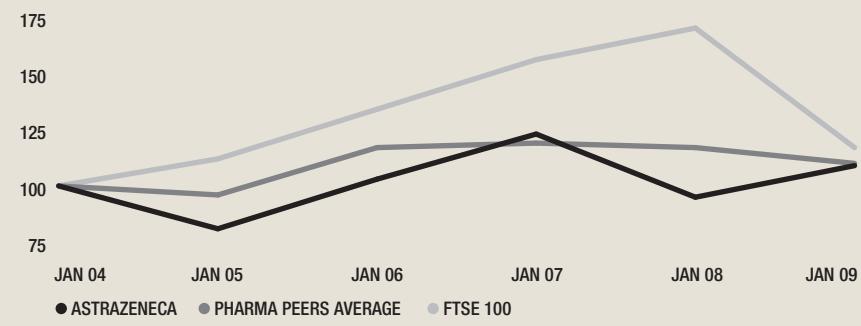
### TOTAL SHAREHOLDER RETURN GRAPHS

The UK Directors' Remuneration Report Regulations 2002 require the inclusion in the Directors' Remuneration Report of a graph showing total shareholder return (TSR) over a five year period in respect of a holding of the Company's shares, plotted against TSR in respect of a hypothetical holding of shares of a similar kind and number by reference to which a broad equity market index is calculated. The Company is a member of the FTSE 100 Index and consequently, for the purposes of this graph, which is set out opposite, we have selected the FTSE 100 Index as the appropriate index. This graph is re-based to 100 at the start of the rolling five-year period. We have also included a 'Pharma Peers Average', which reflects the TSR of the same comparator group used for the Performance Share Plan graphs opposite.

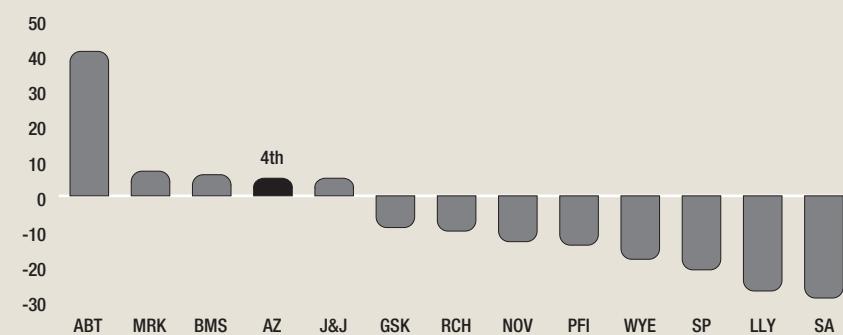
The AstraZeneca Performance Share Plan (PSP) referred to on page 179 requires that the TSR in respect of a holding of the Company's shares over the relevant performance period be compared with the TSR of a peer group of 12 other pharmaceutical companies. The graphs opposite show how the Company's TSR performance has compared with the TSR for the companies in the comparator group from the first day in the relevant three-year performance period in respect of each Award to 31 December 2008 and how the Company ranks against those other companies on this basis.

To alleviate any short-term volatility, the return index is averaged in the TSR calculations for each company over the three months prior to the start of the relevant performance period (as stipulated in the PSP) and, for the purposes of the graphs opposite, over the last three months of 2008.

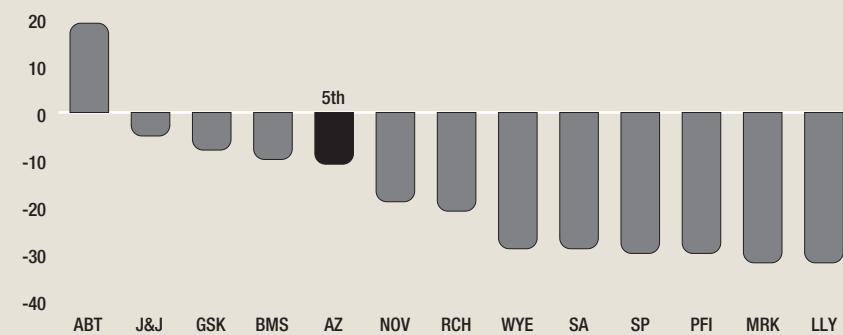
### TSR OVER A FIVE YEAR PERIOD



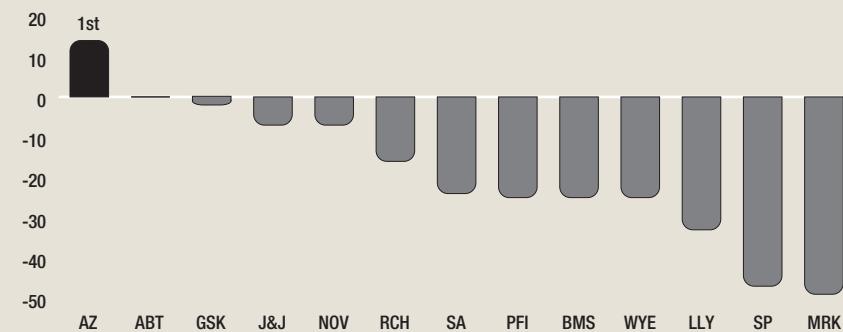
### TSR – ASTRAZENECA COMPARED WITH PEER GROUP 1 JAN 2006 TO 31 DEC 2008 (FOR THE 2006 AWARD)



### TSR – ASTRAZENECA COMPARED WITH PEER GROUP 1 JAN 2007 TO 31 DEC 2008 (FOR THE 2007 AWARD)



### TSR – ASTRAZENECA COMPARED WITH PEER GROUP 1 JAN 2008 TO 31 DEC 2008 (FOR THE 2008 AWARD)



## DIRECTORS' INTERESTS IN SHARES

## BENEFICIAL INTERESTS

The table below shows the interests at 31 December 2008 or on the date of resignation (if earlier) of the persons who on that date were Directors (including the interests of their Connected Persons, as such term is defined in the Companies Act 2006) in shares and debentures of AstraZeneca PLC. All such interests were beneficial except as otherwise stated. However, interests in Ordinary Shares or ADSs that are the subject of awards under the AstraZeneca PSP, the AstraZeneca Deferred Bonus Plan or the AstraZeneca US Executive Performance Share Plan discussed elsewhere, are not included in the table below but are shown on page 186 to page 187. None of the Directors has a beneficial interest in the shares of any of the Company's subsidiaries. Between 31 December 2008 and 29 January 2009 there was no change in the interests in shares and debentures shown in the table below.

Director	Beneficial Interest in Ordinary Shares at 1 January 2008 or (if later) appointment date	Change to beneficial interest	Beneficial Interest in Ordinary Shares at 31 December 2008 or (if earlier) resignation date
Louis Schweitzer	4,000	–	4,000
Håkan Mogren	62,164	–	62,164
David Brennan	115,644	(2,796) <sup>1</sup>	112,848 <sup>2</sup>
Simon Lowth	850	–	850
John Patterson	8,015	625	8,640
Bo Angelin	500	–	500
John Buchanan	2,500	–	2,500
Jean-Philippe Courtois <sup>3</sup>	–	500	500
Jane Henney	500	–	500
Michele Hooper	500	–	500
Rudy Markham <sup>4</sup>	1,137	–	1,137
Nancy Rothwell	500	–	500
John Varley	500	–	500
Marcus Wallenberg	67,264	–	67,264

<sup>1</sup> This figure represents the difference between the net number of ADSs acquired by David Brennan from the vesting of his 2005 award under the US Executive Performance Share Plan and the net reduction in his notional beneficial interest in ADSs held within the unitised stock plans (see separate tables and footnotes below).

<sup>2</sup> The total number of Ordinary Shares and ADSs in which David Brennan has an interest (including potential interests in unreleased shares held in Company plans as detailed in the tables below) has increased in 2008 by 147,683 to 508,822 as at 31 December 2008.

<sup>3</sup> Part year only as appointed Director on 18 February 2008.

<sup>4</sup> Part year only as appointed Director on 12 September 2008.

## UNITISED STOCK PLANS

David Brennan, in common with other participating executives in the US, has interests awarded to him prior to him becoming Chief Executive Officer in the following: the AstraZeneca Executive Deferral Plan, the AstraZeneca Executive Deferred Compensation Plan and the AstraZeneca Savings and Security Plan. These are unitised stock plans into which the value of certain previous share incentive awards has been deferred (and are not incentive awards in their own right). Participants hold units in each plan, which represents a long-term equity interest in the Company. A unit comprises part cash and part ADSs. The overall unit value can be determined daily by taking the market value of the underlying ADSs and adding the cash position. The ADSs held within these units carry both voting and dividend rights. David Brennan is deemed to have a notional beneficial interest in these ADSs, calculated by reference to the fund value and the closing price of ADSs. Therefore, the number of ADSs in which a notional beneficial interest arises can vary daily as a consequence of stock price movements.

Unitised stock plan	ADSs held at 1 Jan 2008	Net ADSs acquired/(disposed) during 2008	ADSs held at 31 Dec 2008
AstraZeneca Executive Deferral Plan	63,789	(22,849) <sup>1</sup>	40,940
AstraZeneca Executive Deferred Compensation Plan	30,382	1,621	32,003
AstraZeneca Savings and Security Plan	6,983	717	7,700

<sup>1</sup> This figure relates to a scheduled distribution in February 2008.

No Director or senior executive beneficially owns, or has options over, 1% or more of the outstanding shares of the Company, nor do they have different voting rights to other shareholders.

### ASTRAZENECA PERFORMANCE SHARE PLAN

The interests of Directors at 31 December 2008 in shares that are the subject of Awards under the AstraZeneca Performance Share Plan are not included in the table on the previous page but are shown below:

Award	Numbers of shares	Award price	Grant date <sup>1</sup>	Vesting date <sup>1</sup>	Performance period <sup>1</sup>
David Brennan					
2006 Award	73,109	2975p	24.03.06	24.03.09	01.01.06 – 31.12.08
2006 Award	19,092	2848p	19.05.06	19.05.09	01.01.06 – 31.12.08
2007 Award	107,051	2744p	30.03.07	30.03.10	01.01.07 – 31.12.09
Total at 1 Jan 2008	199,252				
2008 Award	161,546	1882p	28.03.08	28.03.11	01.01.08 – 31.12.10
Total at 31 Dec 2008	360,798				
John Patterson					
2005 Award	41,945	2241p	29.06.05	29.06.08	01.01.05 – 31.12.07
2006 Award	32,319	2975p	24.03.06	24.03.09	01.01.06 – 31.12.08
2007 Award	36,785	2744p	30.03.07	30.03.10	01.01.07 – 31.12.09
Total at 1 Jan 2008	111,049				
Lapse of 2005 Award	(41,945)				
2008 Award	57,385	1882p	28.03.08	28.03.11	01.01.08 – 31.12.10
Total at 31 Dec 2008	126,489				
Simon Lowth					
2007 Award	15,554	2210p	16.11.07	16.11.10	01.01.07 – 31.12.09
Total at 1 Jan 2008	15,554				
2008 Award	58,448	1882p	28.03.08	28.03.11	01.01.08 – 31.12.10
Total at 31 Dec 2008	74,002				

<sup>1</sup> UK date convention applies.

### US EXECUTIVE PERFORMANCE SHARE PLAN

The interests of David Brennan at 31 December 2008 in ADSs of AstraZeneca PLC that are the subject of awards under the AstraZeneca US Executive Performance Share Plan (established in 2000) are not included in the above tables but are shown below. One ADS equals one Ordinary Share. The number of ADSs to which David Brennan may become unconditionally entitled on the vesting date will be determined by reference to AstraZeneca's total shareholder return compared with that of other companies in the US Pharmaceutical Human Resources Association over the three year performance period from the date of first award.

Award	Number of ADSs	Award price	Grant date <sup>1</sup>	Vesting date <sup>1</sup>	Performance period <sup>1</sup>
David Brennan					
2005 Award	27,877	\$40.35	24.03.05	24.03.08	01.01.05 – 31.12.07
Total at 1 Jan 2008	27,877				
Partial vesting of 2005 Award <sup>2</sup>	(26,762) <sup>3</sup>				
Partial lapse of 2005 Award	(1,115)				
Total at 31 Dec 2008	–				

<sup>1</sup> UK date convention applies.

<sup>2</sup> Vesting of 2005 Award was paid out in the form of ADSs. The ADS price on the vesting date was \$37.63.

<sup>3</sup> Following certain mandatory tax deductions, David Brennan became beneficially interested in a net number of 17,715 ADSs.

### DEFERRED BONUS PLAN

There is a requirement for SET members, including the Executive Directors, to defer a proportion of their bonus and to use it to acquire Ordinary Shares in the Company purchased on the market at the prevailing market price for a period of three years from the date on which the shares were first acquired. The proportion currently deferred into Ordinary Shares is one third of the pre-tax bonus for Executive Directors and one sixth for all other SET members. The interests of Directors and former Directors at 31 December 2008, or on the date of resignation (if earlier), in Ordinary Shares that are the subject of awards under these arrangements are not included in the table on the previous page but are shown opposite:

Award	Number of shares	Award price	Grant date <sup>1</sup>	Vesting date <sup>1</sup>
David Brennan				
2006 Award	6,352	2639p	24.02.06	24.02.09
2007 Award	12,014	2911p	23.02.07	23.02.10
Total at 1 Jan 2008	18,366			
2008 Award	16,810	1999p	25.02.08	25.02.11
Total at 31 Dec 2008	35,176			
John Patterson				
2006 Award	6,623	2639p	24.02.06	24.02.09
2007 Award	5,600	2911p	23.02.07	23.02.10
Total at 1 Jan 2008	12,223			
2008 Award	7,810	1999p	25.02.08	25.02.11
Total at 31 Dec 2008	20,033			
Simon Lowth				
Total at 1 Jan 2008	–			
2008 Award	1,340	1999p	25.02.08	25.02.11
Total at 31 Dec 2008	1,340			

<sup>1</sup> UK date convention applies.

## SHARE OPTIONS

The interests of Directors, and of former Directors who served during 2008, in options to subscribe for Ordinary Shares in the Company, which include options granted under the AstraZeneca Share Option Plan, the AstraZeneca Savings-Related Share Option Plan and the 1994 Executive Share Option Scheme, together with options granted and exercised during 2008, are included in the following table. All grants in 2008 were made under the AstraZeneca Share Option Plan, unless otherwise indicated.

		Number of Ordinary Shares under option	Exercise price per Ordinary Share <sup>1</sup>	Market price at date of exercise	First day exercisable <sup>2,3</sup>	Last day exercisable <sup>2,3</sup>
Håkan Mogren	At 1 Jan 2008	244,896	2848p		13.12.02	24.03.13
	– market price above option price	–	N/A		N/A	N/A
	– market price at or below option price	244,896	2848p		13.12.02	24.03.13
	At 31 Dec 2008	244,896	2848p		13.12.02	24.03.13
	– market price above option price	139,530	2499p		13.12.02	24.03.13
	– market price at or below option price	105,366	3309p		23.08.03	27.03.12
David Brennan	At 1 Jan 2008 – options over ADSs	355,246	\$45.22		16.03.03	23.03.15
	At 1 Jan 2008 – options over Ordinary Shares	239,103	2839p		24.03.09	29.03.17
	– market price above option price (ADSs)	110,987	\$40.35		24.03.08	23.03.15
	– market price above option price (Ordinary Shares)	–	N/A		N/A	N/A
	– market price at or below option price (ADSs)	244,259	\$47.44		16.03.03	25.03.14
	– market price at or below option price (Ordinary Shares)	239,103	2839p		24.03.09	29.03.17
	Granted	193,856	1882p		28.03.11	27.03.18
	At 31 Dec 2008 – options over ADSs	355,246	\$45.22		16.03.03	23.03.15
	At 31 Dec 2008 – options over Ordinary Shares	432,959	2410p		24.03.09	27.03.18
	– market price above option price (ADSs)	110,987	\$40.35		24.03.08	23.03.15
	– market price above option price (Ordinary Shares)	322,318	2226p		30.03.10	27.03.18
	– market price at or below option price (ADSs)	244,259	\$47.44		16.03.03	25.03.14
	– market price at or below option price (Ordinary Shares)	110,641	2949p		24.03.09	18.05.16
Simon Lowth	At 1 Jan 2008	18,665	2210p		16.11.10	15.11.17
	– market price above option price	–	N/A		N/A	N/A
	– market price at or below option price	18,665	2210p		16.11.10	15.11.17
	Granted	70,138	1882p		28.03.11	27.03.18
	At 31 Dec 2008	88,803	1951p		16.11.10	27.03.18
	– market price above option price	88,803	1951p		16.11.10	27.03.18
	– market price at or below option price	–	N/A		N/A	N/A
John Patterson	At 1 Jan 2008	237,159	2735p		25.03.02	29.03.17
	– market price above option price	53,282	2129p		01.12.07	23.03.15
	– market price at or below option price	183,877	2911p		25.03.02	29.03.17
	Granted	68,862	1882p		28.03.11	27.03.18
	Exercised	374	1756p	2110p	01.12.07	31.05.08
	Exercised	251	2262p	2110p	01.12.07	31.05.08
	At 31 Dec 2008	305,396	2544p		25.03.02	27.03.18
	– market price above option price	213,606	2279p		25.03.02	27.03.18
	– market price at or below option price	91,790	3163p		23.08.03	23.03.16

<sup>1</sup> Exercise prices at 1 January and 31 December are weighted averages.

<sup>2</sup> First and last exercise dates of groups of options, within which period there are shorter exercise periods.

<sup>3</sup> UK date convention applies.

#### GAINS BY DIRECTORS ON EXERCISE OF SHARE OPTIONS

The aggregate amount of gains made by Directors on the exercise of share options during the year and the two previous years is set out below.

Year	Gains made by Directors on the exercise of share options \$	Gains made by the highest paid Director \$
2008	1,764.96	—
2007	783,858.08	—
2006	2,962,173.19	2,212,636.27

During 2008, the market price of shares in the Company was as follows:

Stock Exchange	Share market price as at 31 December 2008	Range of the share market price during 2008
London	2807p	1748p to 2888p
Stockholm	307.00 SEK	211.50 SEK to 340.50 SEK
New York	\$41.03	\$34.10 to \$49.85

The Register of Directors' Interests (which is open to inspection) contains full details of Directors' shareholdings and options to subscribe for Ordinary Shares.

On behalf of the Board

**A C N KEMP**  
Company Secretary

29 January 2009

A black and white profile photograph of a woman's face, looking towards the right. Her right hand is raised, with her fingers near her temple, suggesting a thoughtful or contemplative pose. The lighting is soft, creating a dramatic effect.

**ADDITIONAL INFORMATION**

# 190 SHAREHOLDER INFORMATION

AstraZeneca	2004	2005	2006	2007	2008
<b>Ordinary Shares in issue – millions</b>					
At year end	1,645	1,581	1,532	1,457	<b>1,447</b>
Weighted average for year	1,673	1,617	1,564	1,495	<b>1,453</b>
Stock market price – per \$0.25 Ordinary Share					
Highest (pence)	2749	2837	3529	2984	<b>2888</b>
Lowest (pence)	1863	1861	2574	2093	<b>1748</b>
At year end (pence)	1889	2829	2744	2164	<b>2807</b>

## PERCENTAGE ANALYSIS AT 31 DECEMBER 2008 OF ISSUED SHARE CAPITAL

By size of account No. of shares	2008 %
1 – 250	0.5
251 – 500	0.7
501 – 1,000	0.9
1,001 – 5,000	1.2
5,001 – 10,000	0.2
10,001 – 50,000	1.0
50,001 – 1,000,000	13.6
Over 1,000,000 <sup>1</sup>	81.9
Issued share capital	100.0

<sup>1</sup> Includes VPC and ADR holdings.

At 31 December 2008, AstraZeneca PLC had 135,790 registered holders of 1,447,481,548 Ordinary Shares of \$0.25 each. At 31 December 2008, there were approximately 52,000 holders of American Depository Receipts (ADRs) representing 7.36% of the issued share capital and 146,000 holders of shares held under the VPC Services Agreement representing 17.83% of the issued share capital. The ADRs, each of which is equivalent to one Ordinary Share, are issued by JPMorgan Chase Bank.

## ASTRAZENECA PLC

Since April 1999, following the AstraZeneca merger, the principal markets for trading in the shares of AstraZeneca PLC are the London, Stockholm and New York Stock Exchanges. The table below sets out, for the four quarters of 2007 and for the first two quarters and last six months of 2008 the reported high and low share prices of AstraZeneca PLC, on the following bases:

- > For shares listed on the London Stock Exchange (LSE) the reported high and low middle market closing quotations are derived from The Daily Official List.
- > For shares listed on the Stockholm Stock Exchange (SSE) the high and low closing sales prices are as stated in the Official List.
- > For American Depository Shares (ADS) listed on the New York Stock Exchange the reported high and low sales prices are as reported by Dow Jones (ADR quotations).

		Ordinary LSE		ADS		Ordinary SSE <sup>1</sup>	
		High (pence)	Low (pence)	High (US\$)	Low (US\$)	High (SEK)	Low (SEK)
2007	– Quarter 1	2984	2734	58.78	53.53	414.0	367.5
	– Quarter 2	2953	2567	59.04	51.00	401.0	354.5
	– Quarter 3	2770	2278	56.16	45.56	374.5	315.0
	– Quarter 4	2589	2093	52.47	42.82	343.5	272.0
2008	– Quarter 1	2345	1748	45.70	35.50	296.5	211.5
	– Quarter 2	2289	1981	44.57	39.36	268.0	235.5
	– July	2468	2130	48.55	43.42	292.0	255.5
	– August	2693	2437	49.85	47.55	314.0	292.0
	– September	2766	2415	48.95	43.53	321.5	292.5
	– October	2630	2075	44.76	36.50	320.0	253.5
	– November	2888	2245	44.38	34.10	340.5	280.5
	– December	2807	2420	41.12	35.24	326.0	300.0

<sup>1</sup> Principally held in bearer form.

During 2008, AstraZeneca's share re-purchase programme, which was introduced in 1999, continued with the re-purchase and subsequent cancellation of 13.6 million shares at a total cost of \$610m, representing 0.9% of the total issued share capital of the Company. The average price paid per share in 2008 was 2397 pence. This brings the total number of shares repurchased to date since the beginning of the re-purchase programme in 1999, to 376.3 million Ordinary Shares (at an average price of 2661 pence per share) for a consideration, including expenses, of \$18,099m. The excess of the consideration over the nominal value was charged against the profit and loss account reserve. Shares issued in respect of share schemes totalled 4.1 million.

In 1999, in connection with the merger, AstraZeneca's share capital was redenominated in US dollars. On 6 April 1999, Zeneca shares were cancelled and US dollar shares issued, credited as fully paid on the basis of one dollar share for each Zeneca share then held. This was achieved by a reduction of capital under section 135 of the Companies Act 1985. Upon the reduction of capital becoming effective, all issued and unissued Zeneca shares were cancelled and the sum arising as a result thereof credited to a special reserve, which was converted into US dollars at the rate of exchange prevailing on the record date. This US dollar reserve was then applied in paying up, at par, newly created US dollar shares.

At the same time as the US dollar shares were issued, the Company issued 50,000 Redeemable Preference Shares with a nominal value of £1.00 each for cash at par. The Redeemable Preference Shares carry limited class voting rights and no dividend rights. This class of shares is also capable of redemption at par at the option of the Company on the giving of seven days' written notice to the registered holder of the shares.

A total of 826 million AstraZeneca shares were issued to Astra shareholders who accepted the merger offer before the final closing date, 21 May 1999. AstraZeneca received acceptances from Astra shareholders representing 99.6% of Astra's shares and the remaining 0.4% was acquired in 2000 for cash.

## MAJOR SHAREHOLDINGS

At 29 January 2009, the following had disclosed an interest in the issued Ordinary Share capital of the Company in accordance with the requirements of section 5.1.2 of the UK Listing Authority's Disclosure and Transparency Rules:

Shareholder	Number of shares	Date of disclosure to Company <sup>1</sup>	Percentage of issued share capital
Capital Research and Management Company	71,261,060	25 Jun 2007	4.92%
Axa SA	70,934,559	20 Dec 2007	4.90%
Investor AB	63,465,810	11 Feb 2004	4.38%
Barclays PLC	61,721,820	18 Dec 2006	4.26%
Wellington Management Co., LLP	60,565,299	30 Oct 2006	4.18%
Legal & General Investment Management Limited	59,198,535	12 Sept 2007	4.09%

<sup>1</sup> Since the date of disclosure to the Company, the interest of any person listed above in the Ordinary Shares of the Company may have increased or decreased. No requirement to notify the Company of any increase or decrease would have arisen unless the holding moved up or down through a whole number percentage level. The percentage level may increase (on the cancellation of shares following a re-purchase of shares under the Company's share re-purchase programme) or decrease (on the issue of new shares under any of the Company's share plans).

No other person held a notifiable interest in shares, comprising 3% or more of the issued Ordinary Share capital of the Company.

Changes in the percentage ownership held by major shareholders during the past three years are set out below. Major shareholders do not have different voting rights.

Shareholder	29 Jan 2009	31 Jan 2008	31 Jan 2007	31 Jan 2006	Percentage of issued share capital
Capital Research and Management Company	4.92%	4.89%	11.70%	12.57%	
Axa SA	4.90%	4.87%	—	—	
Investor AB	4.38%	4.36%	4.14%	4.01%	
Barclays PLC	4.26%	4.24%	4.03%	3.20%	
Wellington Management Co., LLP	4.18%	4.16%	3.95%	4.97%	
Legal & General Investment Management Limited	4.09%	4.06%	3.43%	3.32%	

AstraZeneca PLC American Depository Shares (each representing one Ordinary Share) evidenced by American Depository Receipts issued by JPMorgan Chase Bank, as depositary, are listed on the New York Stock Exchange. At 29 January 2009, the proportion of Ordinary Shares represented by American Depository Shares was 7.20% of the Ordinary Shares outstanding.

## MAJOR SHAREHOLDINGS CONTINUED

Number of registered holders of Ordinary Shares at 29 January 2009:

> In the US	794
> Total	128,748

Number of record holders of American Depository Receipts at 29 January 2009:

> In the US	2,296
> Total	2,330

So far as the Company is aware, it is neither directly nor indirectly owned nor controlled by one or more corporations or by any government.

At 29 January 2009, the total amount of the Company's voting securities owned by Directors and Officers of the Company was:

Title of class	Amount owned	Percentage of class
Ordinary Shares	294,034	0.02%

The Company does not know of any arrangements, the operation of which might result in a change in the control of the Company.

## RELATED PARTY TRANSACTIONS

During the period 1 January 2009 to 29 January 2009, there were no transactions, loans, or proposed transactions between the Company and any related parties which were material to either the Company or the related party, or which were unusual in their nature or conditions (see also Note 27 to the Financial Statements).

## OPTIONS TO PURCHASE SECURITIES FROM REGISTRANT OR SUBSIDIARIES

(a) At 29 January 2009, options outstanding to subscribe for Ordinary Shares of \$0.25 of the Company were:

Number of shares	Subscription price	Normal expiry date
55,640,140	1882p – 3487p	2009 – 2018

The weighted average subscription price of options outstanding at 29 January 2009 was 2519p. All options were granted under Company employee share schemes.

(b) Included in paragraph (a) are options granted to Directors and Officers of AstraZeneca as follows:

Number of shares	Subscription price	Normal expiry date
2,428,727	1882p – 3487p	2009 – 2018

(c) Included in paragraph (b) are options granted to individually named Directors. Details of these option holdings at 31 December 2008 are shown in the Directors' Remuneration Report.

During the period 1 January 2009 to 29 January 2009, no Director exercised any options.

## DIVIDEND PAYMENTS

For Ordinary Shares listed on the London and Stockholm Stock Exchanges and ADRs listed on the New York Stock Exchange, the record date for the second interim dividend for 2008, payable on 16 March 2009, is 6 February 2009 and the ex-dividend date is 4 February 2009.

The record date for the first interim dividend for 2009, payable on 14 September 2009, is 7 August 2009.

Future dividends will normally be paid as follows:

First interim: Announced in July and paid in September.

Second interim: Announced in January and paid in March.

**SHAREVIEW**

AstraZeneca's shareholders with internet access may visit shareview.co.uk and register their details to create a portfolio. Shareview is a free and secure on-line service from the Company's registrars, Equiniti Limited, which gives access to shareholdings including balance movements, indicative share prices and information about recent dividends.

**SHAREGIFT**

AstraZeneca welcomes and values all of its shareholders, no matter how many or how few shares they own. However, shareholders who have only a small number of shares whose value makes it uneconomic to sell them, either now or at some stage in the future, may wish to consider donating them to charity through ShareGift, an independent charity share donation scheme. One feature of the scheme is that there is no gain or loss for UK capital gains tax purposes on gifts of shares through ShareGift, and it may now also be possible to obtain UK income tax relief on the donation. Further information about ShareGift can be found on its website, sharegift.org, or by contacting ShareGift on 020 7930 3737 or at 17 Carlton House Terrace, London SW1Y 5AH. More information about the UK tax position on gifts of shares to ShareGift can be obtained from HM Revenue & Customs, whose website address is hmrc.gov.uk. The share transfer form needed to make a donation may be obtained from the Company's registrars, Equiniti Limited, whose address can be found on the back cover of this document. ShareGift is administered by The Orr Mackintosh Foundation, registered charity number 1052686.

**THE UNCLAIMED ASSETS REGISTER**

AstraZeneca supplies unclaimed dividend data to the Unclaimed Assets Register (UAR), which provides investors who have lost track of shareholdings with an opportunity to search the UAR's database of unclaimed financial assets on payment of a small, fixed fee. The UAR donates part of the search fee to charity. The UAR can be contacted on 0870 241 1713 or at PO Box 9501, Nottingham NG80 1WD.

**RESULTS**

Unaudited trading results of AstraZeneca in respect of the first three months of 2009 will be published on 30 April 2009 and results in respect of the first six months of 2009 will be published on 30 July 2009.

**DOCUMENTS ON DISPLAY**

The Memorandum and Articles of Association of the Company and other documents concerning the Company which are referred to in this document may be inspected at the Company's registered office at 15 Stanhope Gate, London W1K 1LN.

**TAXATION FOR US RESIDENTS**

The following summary of the material UK and US federal income tax consequences of ownership of Ordinary Shares or ADRs held as capital assets by US resident shareholders is based on current UK and US federal income tax law, including the US/UK double taxation convention relating to income and capital gains, which entered into force on 31 March 2003 (the Convention). This discussion is also based in part on representations of JPMorgan Chase Bank as depositary for ADRs and assumes that each obligation in the deposit agreement among the Company, the depositary and the holders from time to time of ADRs and any related agreements will be performed in accordance with its terms. The US Treasury has expressed concerns that parties to whom ADRs are pre-released may be taking actions that are inconsistent with the claiming, by US holders of ADRs, of foreign tax credits for US federal income tax purposes. Such actions would also be inconsistent with the claiming of the reduced tax rate, described below, applicable to dividends received by certain non-corporate US resident shareholders. Accordingly, the availability of the reduced tax rate for dividends received by certain non-corporate US resident shareholders could be affected by actions that may be taken by parties to whom ADRs are pre-released.

This discussion assumes that we are not, and will not become, a passive foreign investment company (PFIC), as discussed below.

**UK AND US INCOME TAXATION OF DIVIDENDS**

The UK does not currently impose a withholding tax on dividends paid by a UK company, such as the Company.

For US federal income tax purposes, distributions paid by the Company to a US resident shareholder are included in gross income as foreign source ordinary dividend income to the extent of the Company's current or accumulated earnings and profits, calculated in accordance with US federal income tax principles. The amount of the dividend will be the US dollar amount received by the depositary for US resident holders of ADRs (or in the case of Ordinary Shares, the US dollar value of the pounds sterling on the date the dividend is received by the US resident shareholders, regardless of whether the dividend is converted into US dollars), and it will not be eligible for the dividends received deduction generally available to US corporations. If the dividend is converted into US dollars on the date of receipt, US resident holders of Ordinary Shares generally should not be required to recognise foreign currency gain or loss in respect of the dividend income. They may have foreign currency gain or loss if the amount of such dividend is not converted into US dollars on the date of its receipt.

Subject to applicable limitations and the discussion above regarding concerns expressed by the US Treasury, dividends received by certain non-corporate US resident holders of Ordinary Shares or ADRs in taxable years beginning before 1 January 2011 may be subject to US federal income tax at a maximum rate of 15%. US resident shareholders should consult their own tax advisers to determine whether they are subject to any special rules which may limit their ability to be taxed at this favourable rate.

**TAXATION ON CAPITAL GAINS**

Under the Convention, each contracting state may in general tax capital gains in accordance with the provisions of its domestic law. Under present UK law, individuals who are neither resident nor ordinarily resident in the UK, and companies which are not resident in the UK, will not be liable to UK tax on capital gains made on the disposal of their Ordinary Shares or ADRs, unless such Ordinary Shares or ADRs are held in connection with a trade, profession or vocation carried on in the UK through a branch or agency.

## TAXATION ON CAPITAL GAINS CONTINUED

A US resident shareholder will generally recognise US source capital gain or loss for US federal income tax purposes on the sale or exchange of Ordinary Shares or ADRs in an amount equal to the difference between the US dollar amount realised and such holder's US dollar adjusted tax basis in the Ordinary Shares or ADRs. US resident shareholders should consult their own tax advisers about the treatment of capital gains, which may be taxed at lower rates than ordinary income for non-corporate US resident shareholders and capital losses, the deductibility of which may be limited.

## PASSIVE FOREIGN INVESTMENT COMPANY RULES

We believe that we were not a passive foreign investment company (PFIC) for US federal income tax purposes for the year ended 31 December 2008, and do not expect to be a PFIC in the foreseeable future. However, since PFIC status depends on the composition of our income and assets and the market value of our assets (including, among others, less than 25%-owned equity investments) from time to time, there can be no assurance that we will not be considered a PFIC for any taxable year. If we were treated as a PFIC for any taxable year during which Ordinary Shares or ADRs were held, certain adverse tax consequences could apply to US resident shareholders.

## UK INHERITANCE TAX

Under the current Double Taxation (Estates) Convention (the Estate Tax Convention) between the US and the UK, Ordinary Shares or ADRs held by an individual shareholder who is domiciled for the purposes of the Estate Tax Convention in the US, and is not for the purposes of the Estate Tax Convention a national of the UK, will generally not be subject to UK inheritance tax on the individual's death or on a chargeable gift of the Ordinary Shares or ADRs during the individual's lifetime, provided that any applicable US federal gift or estate tax liability is paid, unless the Ordinary Shares or ADRs are part of the business property of a permanent establishment of the individual in the UK or, in the case of

a shareholder who performs independent personal services, pertain to a fixed base situated in the UK. Where the Ordinary Shares or ADRs have been placed in trust by a settlor who, at the time of settlement, was a US resident shareholder, the Ordinary Shares or ADRs will generally not be subject to UK inheritance tax unless the settlor, at the time of settlement, was not domiciled in the US and was a UK national. In the exceptional case where the Ordinary Shares or ADRs are subject to both UK inheritance tax and US federal gift or estate tax, the Estate Tax Convention generally provides for double taxation to be relieved by means of credit relief.

## UK STAMP DUTY RESERVE TAX AND STAMP DUTY

A 1.5% stamp duty reserve tax is payable upon the deposit of Ordinary Shares in connection with the creation of, but not subsequent dealing in, ADRs. A 0.5% stamp duty is payable on all purchases of Ordinary Shares.

## EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS

There are no governmental laws, decrees or regulations in the UK restricting the import or export of capital or affecting the remittance of dividends, interest or other payments to non-resident holders of Ordinary Shares or ADRs.

There are no limitations under English law or the Company's Memorandum and Articles of Association on the right of non-resident or foreign owners to be the registered holders of and to vote Ordinary Shares or ADRs or to be registered holders of notes or debentures of Zeneca Wilmington Inc. or AstraZeneca PLC.

## EXCHANGE RATES

For the periods up to April 1999, Astra accounted for and reported its results in Swedish kronor, whereas Zeneca accounted for and reported its results in sterling. Consistent with AstraZeneca's decision to publish its Financial Statements in US dollars, the financial information in this document has been translated from kronor and sterling into US dollars at the following applicable exchange rates:

	SEK/USD	USD/GBP
Average rates (profit and loss account, cash flow)		
1995	7.1100	1.5796
1996	6.7000	1.5525
1997	7.6225	1.6386
1998	7.9384	1.6603
1999	8.2189	1.6247
End of year spot rates (balance sheet)		
1995	6.6500	1.5500
1996	6.8400	1.6900
1997	7.8500	1.6600
1998	8.0400	1.6600
1999	8.5130	1.6185

The following information relating to average and spot exchange rates used by AstraZeneca is provided for convenience:

	SEK/USD	USD/GBP
Average rates (income statement, cash flow)		
2006	7.4472	1.8265
2007	6.7692	2.0003
2008	6.5130	1.8728
End of year spot rates (balance sheet)		
2006	6.8824	1.9626
2007	6.4051	1.9932
2008	7.7740	1.4437

## DEFINITIONS AND INTERPRETATION

Figures in parentheses in tables and in the Financial Statements are used to represent negative numbers.

Except where otherwise indicated, figures included in this Report relating to pharmaceutical product market sizes and market shares are obtained from syndicated industry sources, primarily IMS Health (IMS), a market research firm internationally recognised by the pharmaceutical industry. The 2008 market share figures included in this report are based primarily on data obtained from an online IMS database.

IMS data may differ from that compiled by the Group with respect to its own products. Of particular significance in this regard are the following: (1) AstraZeneca publishes its financial results on a financial year and quarterly interim basis, whereas IMS issues its data on a monthly and quarterly basis; (2) the online IMS database is updated quarterly and uses the average exchange rates for the relevant quarter; (3) IMS data from the US is not adjusted for Medicaid and similar state rebates; and (4) IMS sales data are compiled using actual wholesaler data and data from statistically representative panels of retail and hospital pharmacies, which data are then projected by IMS to give figures for national markets.

References to prevalence of disease have been derived from a variety of sources and are not intended to be indicative of the current market or any potential market for AstraZeneca's pharmaceutical products since, among other things, there may be no correlation between the prevalence of a disease and the number of individuals who are treated for such a disease.

Terms used in the Annual Report and Form 20-F Information	US equivalent or brief description
Accruals	Accrued expenses
Allotted	Issued
Bank borrowings	Payable to banks
Called-up share capital	Issued share capital
Creditors	Liabilities/payables
Current instalments of loans	Long term debt due within one year
Debtors	Receivables and prepaid expenses
Earnings	Net income
Finance lease	Capital lease
Fixed asset investments	Non-current investments
Freehold	Ownership with absolute rights in perpetuity
Interest receivable	Interest income
Interest payable	Interest expense
Loans	Long term debt
Prepayments	Prepaid expenses
Profit	Income
Profit and loss account	Income statement/consolidated statement of income
Reserves	Retained earnings
Short term investments	Redeemable securities and short term deposits
Share premium account	Premiums paid in excess of par value of Ordinary Shares
Statement of recognised income and expense	Statement of comprehensive income

# CORPORATE INFORMATION

## HISTORY AND DEVELOPMENT OF THE COMPANY

AstraZeneca PLC was incorporated in England and Wales on 17 June 1992 under the Companies Act 1985. It is a public limited company domiciled in the UK. The Company's registered number is 2723534 and its registered office is at 15 Stanhope Gate, London W1K 1LN (telephone + 44 (0)20 7304 5000). From February 1993 until April 1999, the Company was called Zeneca Group PLC. On 6 April 1999, the Company changed its name to AstraZeneca PLC.

The Company was formed when the pharmaceutical, agrochemical and specialty chemical businesses of Imperial Chemical Industries PLC were demerged in 1993. In 1999, the Company sold the specialty chemical business. Also in 1999, the Company merged with Astra AB of Sweden. In 2000, it demerged the agrochemical business and merged it with the similar agribusiness of Novartis AG to form a new company called Syngenta AG.

The Company owns and operates numerous R&D, production and marketing facilities worldwide. Its corporate headquarters are at 15 Stanhope Gate, London W1K 1LN.

## MEMORANDUM AND ARTICLES OF ASSOCIATION

### OBJECTS

As is typical of companies registered in England and Wales, the Company's objects, which are detailed in the Memorandum of Association, are broad and wide-ranging and include manufacturing, distributing and trading pharmaceutical products.

Any amendment to the Company's Articles of Association requires the approval of shareholders at a general meeting of the Company.

### DIRECTORS

The Board has the authority to manage the business of the Company, through powers such as authorising the Company to allot and re-purchase its shares. However, subject to certain exceptions, Directors do not have power to vote at Board meetings on matters in which they have a material interest.

The quorum for meetings of the Board of Directors is a majority of the full Board, of whom at least four must be Non-Executive Directors. In the absence of a quorum, the Directors do not have power to determine compensation arrangements for themselves or any member of the Board.

The Board of Directors may exercise all the powers of the Company to borrow money. Variation of these borrowing powers would require the passing of a special resolution of the Company's shareholders.

All Directors must retire from office at the Company's AGM each year and may present themselves for re-election. Directors are not prohibited, upon reaching a particular age, from submitting themselves for election or re-election.

Within two months of the date of appointment, Directors are required to beneficially own Ordinary Shares in the Company of an aggregate nominal amount of \$125, which currently represents at least 500 shares.

## RIGHTS, PREFERENCES AND RESTRICTIONS ATTACHING TO SHARES

The share capital of the Company is divided into 2,400,000,000 Ordinary Shares with a nominal value of \$0.25 each and 50,000 Redeemable Preference Shares with a nominal value of £1.00 each. The rights and restrictions attaching to the Redeemable Preference Shares differ from those attaching to Ordinary Shares as follows:

- > The Redeemable Preference Shares carry no rights to receive dividends.
- > The holders of Redeemable Preference Shares have no rights to receive notices of, attend or vote at general meetings except in certain limited circumstances. They have one vote for every 50,000 Redeemable Preference Shares held.
- > On a distribution of assets of the Company, on a winding-up or other return of capital (subject to certain exceptions), the holders of Redeemable Preference Shares have priority over the holders of Ordinary Shares to receive the capital paid up on those shares.
- > Subject to the provisions of the Companies Act 1985, the Company has the right to redeem the Redeemable Preference Shares at any time on giving not less than seven days' written notice.

## ACTION NECESSARY TO CHANGE THE RIGHTS OF SHAREHOLDERS

In order to vary the rights attached to any class of shares, the consent in writing of the holders of three quarters in nominal value of the issued shares of that class or the sanction of an extraordinary resolution passed at a general meeting of such holders is required.

### GENERAL MEETINGS

Annual general meetings and other general meetings, as from time to time may be required, where a special resolution is to be passed or a Director is to be appointed require 21 clear days' notice to shareholders. All other general meetings require 14 clear days' notice.

For all general meetings, a quorum of two shareholders present in person or by proxy, and entitled to vote on the business transacted, is required.

Shareholders and their duly appointed proxies and corporate representatives are entitled to be admitted to general meetings.

## LIMITATIONS ON THE RIGHTS TO OWN SHARES

There are no limitations on the rights to own shares.

# 198 CROSS-REFERENCE TO FORM 20-F

The information in this document that is referenced on this page is included in AstraZeneca's Form 20-F for 2008 (2008 Form 20-F) and is filed with the Securities and Exchange Commission (SEC). The 2008 Form 20-F is the only document intended to be incorporated by reference into any filings by AstraZeneca under the Securities Act of 1933, as amended. References to major headings include all information under such major headings, including subheadings. References to subheadings include only the information contained under such subheadings. Graphs are not included unless specifically identified. The 2008 Form 20-F has not been approved or disapproved by the SEC, nor has the SEC passed comment upon the accuracy or adequacy of the 2008 Form 20-F. The 2008 Form 20-F filed with the SEC may contain modified information and may be updated from time to time.

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## GLOSSARY

## MARKET DEFINITIONS TABLE

NORTH AMERICA		ESTABLISHED REST OF WORLD			EMERGING REST OF WORLD			
US	Canada	Western Europe	Japan	Other Established	Emerging Europe	China	Emerging Asia Pacific	Other Emerging
US	Canada	Austria Belgium Denmark Finland France Germany Greece Holland Italy Norway Portugal Spain Sweden UK	Japan	Australia New Zealand	Czech Republic Estonia Latvia Poland Slovakia Turkey	China Hong Kong	India Malaysia Philippines South Korea Taiwan Thailand	Algeria Argentina Brazil Central America Chile Colombia Egypt Lebanon Mexico Morocco Peru Saudi Arabia South Africa UAE Venezuela
		Iceland Luxembourg			Albania Belarus Bosnia-Herzegovina Bulgaria Croatia Georgia Hungary Macedonia Romania Russia Serbia/Montenegro		Afghanistan Bangladesh Brunei Cambodia Indonesia Laos Myanmar Nepal Papua New Guinea Singapore Sri Lanka Vietnam	

Emerging Markets means Emerging Rest of World.

Established Markets means North America and Established Rest of World.

IMS Data is not included for those countries listed in the lower table.

The following abbreviations and expressions have the following meanings when used in this report:

**abbreviated new drug application (ANDA)**

A marketing approval application for a generic drug submitted to the US Food and Drug Administration.

**abbreviated new drug submission (ANDS)**

A marketing approval application for a generic drug submitted in Canada.

**adjuvant** An agent that modifies the effect of other agents (for example drugs and vaccines) while having few if any direct effects when given by itself; it operates like a catalyst in chemical reactions.

**ADR** American Depository Receipt evidencing title to an ADS.

**ADS** American Depository Share representing one underlying Ordinary Share.

**agonist** A substance capable of binding to a molecular target to trigger a response.

**angiotensin II** A hormone that causes blood vessels to narrow and thereby raises blood pressure.

**antagonist** A substance capable of binding to a molecular target to neutralise or counteract a reaction.

**anti-cytokine monoclonal antibodies (MAbs)**

A group of large molecule compounds which can block interactions between cytokines and their receptors. Cytokines are a class of signalling molecule, used in cellular communication, similar to hormones and neurotransmitters preventing them from functioning

**AstraZeneca** AstraZeneca PLC and its subsidiaries.

**biomarker** A characteristic that can be measured objectively and evaluated as an indicator of normal biological, or pathogenic processes, or pharmacological responses to a therapeutic intervention.

**biopharmaceuticals/biologics** A class of medicines derived from proteins usually produced naturally by living organisms in response to disease, for example antibodies.

**bipolar disorder** Any of several mood disorders, usually characterised by alternating episodes of depression and mania or by episodes of depression alternating with mild non-psychotic excitement.

**bipolar I disorder** A sub-set of bipolar patients who have experienced one or more manic or mixed episodes.

**biosimilars** Follow-on biopharmaceuticals that are biologically similar to an existing medicine.

**BLA (Biological Licence Application)** Granting of the licence certifies that biological product is safe, pure and potent; and the facility in which it is manufactured meets standards designed to ensure that it continues to be safe, pure and potent.

**Board** The Board of Directors of AstraZeneca PLC.

**CAT** Cambridge Antibody Technology Group plc.

**CER** Constant exchange rates.

**Company** AstraZeneca PLC.

**Complete Response Letter** A complete response is now issued by the FDA when it has completed its evaluation of a regulatory submission.

**cost growth rates** Percentage growth of a particular cost category over the comparable cost category for the previous year.

**depository** JPMorgan Chase Bank, as depository under the deposit agreement pursuant to which the ADRs are issued.

**Director** A director of the Company.

**earnings per share (EPS)** Profit for the year after tax and minority interests, divided by the weighted

average number of Ordinary Shares in issue during the year.

**efficacy** The beneficial effect of a drug refers to the potential maximum therapeutic response that a drug can produce.

**EFPIA** The European Federation of Pharmaceutical Industries and Associations.

**EMEA** The European Medicines Agency.

**Emerging Markets** Emerging Rest of World, see table above.

**Established Markets** North America and Established Rest of World, see table above.

**EU** European Union.

**finance income and expense** This includes interest earned and payable, and similar items.

**first good laboratory practice (FGLP)** The point at which a compound undergoes the first pre-clinical study that is required for regulatory approval; this marks entry into the development pipeline.

**first-line therapy** Treatment given to a newly diagnosed patient, who has therefore not yet been treated; it is the initial treatment of a disease, sign or symptom.

**Food and Drug Administration (FDA)** Part of the US Department of Health and Human Services Agency, which is the regulatory authority for all pharmaceuticals (including biologics and vaccines) and medical devices in the US.

**generalised anxiety disorder (GAD)** A neurotic illness characterised by chronic and persistent apprehension and tension.

**gross margin** The margin, as a percentage, by which sales exceed the cost of sales, calculated by dividing the difference between the two by the sales figure.

<b>Group</b> AstraZeneca PLC and its subsidiaries.	<b>outcomes study</b> A clinical trial (usually large) assessing the effect of a drug in preventing or delaying a specific and important medical event (for example the occurrence of a heart attack).	<b>siRNA molecules</b> Small or short or silencing interfering RNA. A class of 20-25 nucleotide double stranded RNA molecules that interfere with the expression of a specific gene. In this specific case, siRNA is a type of anti-viral agent.
<b>high-density lipoprotein cholesterol (HDL-C)</b> Cholesterol carried in the blood by HDL back to the liver, sometimes referred to as 'good' cholesterol.	<b>parenteral</b> Administered by injection (for example intravenous, sub-cutaneous and intramuscular).	<b>small molecule</b> A general term used to describe pharmaceutical R&D using chemistry and chemical methods and materials to discover and develop new medicines. Chemical molecules are small compared with biological molecules.
<b>hsCRP</b> A high-sensitivity C-Reactive Protein to determine the potential risk for cardiovascular disease (measures levels of C-Reactive Protein in the blood).	<b>Pharmaceutical Research and Manufacturers of America (PhRMA)</b> The principal US pharmaceutical industry association.	<b>specialist care</b> The medical care the patient receives after being referred by the primary care provider.
<b>IAS</b> International Accounting Standards.	<b>pharmacovigilance</b> The scientific collection and evaluation of information from healthcare providers and patients relating to the adverse effects of medicines.	<b>sterling, £, GBP, pence or p</b> References to the currency of the UK.
<b>IFRS</b> International Financial Reporting Standards.	<b>Phase I</b> The phase of clinical research where a new drug or treatment is tested in small groups of people (20 to 80) to check that the drug can achieve appropriate concentrations in the body, determine a safe dosage range and identify side effects. This phase includes healthy volunteer studies.	<b>supplemental new drug application (sNDA)</b> An application made to the US Food and Drug Administration to seek approval to market an additional indication for a drug already on the market.
<b>KPI</b> Key performance indicator.	<b>Phase II</b> This phase of clinical research includes the controlled clinical activities conducted to evaluate the effectiveness of the drug in patients with the disease under study and to determine the common short-term side effects and risks associated with the drug. Phase II studies are typically conducted in a relatively small number of patients (usually no more than several hundred).	<b>TSR</b> Total shareholder return.
<b>large molecule</b> A general term used to describe pharmaceutical R&D using biology and biological methods and materials to discover and develop new medicines. Biological molecules are large compared with chemical molecules.	<b>Phase III</b> This phase of clinical research is performed to gather additional information about effectiveness and safety of the drug, often in a comparative setting, to evaluate the overall benefit/risk profile of the drug. Phase III studies usually include between several hundred and several thousand patients.	<b>UK</b> The United Kingdom of Great Britain and Northern Ireland.
<b>LIBID</b> London Interbank Bid Rate.	<b>placebo</b> In clinical trials, an inert substance identical in appearance to the substance being tested, also known as a sugar pill.	<b>UK Combined Code</b> Guidance that sets out standards of good practice in corporate governance for the UK.
<b>low-density lipoprotein cholesterol (LDL-C)</b> Cholesterol that is carried in the blood by LDL, sometimes referred to as 'bad' cholesterol.	<b>poly-ADP-ribose polymerase (PARP)</b> An enzyme critical to the repair of damaged cells and maintenance of cellular energy.	<b>US</b> The United States of America.
<b>LSE</b> London Stock Exchange plc.	<b>pre-clinical studies</b> Studies conducted before a drug is tested in human subjects, and which support and help establish boundaries for safe use of the drug in subsequent Phase I studies.	<b>US dollar, US\$, USD or \$</b> References to the currency of the US.
<b>MAb (Monoclonal antibody)</b> A large molecule that is extremely specific; that is, it binds to and attacks one particular antigen.	<b>pressurised metered dose inhaler (pMDI)</b> An aerosol inhaler/puffer device for delivering medicine directly into the lungs.	<b>World Health Organization (WHO)</b> The United Nations' specialised agency for health.
<b>major depressive disorder (MDD)</b> Depression where five or more symptoms of depression are present for at least two weeks.	<b>primary care</b> The medical care that a patient receives upon first contact with the healthcare system, before referral elsewhere within the system.	<b>XR</b> Extended release.
<b>marketing authorisation application (MAA)</b> An application for authorisation to place medical products on the market. This is a specific term for the EU and European Economic Area (EEA) markets.	<b>profit before tax</b> Operating profit, plus finance income, less finance expense.	
<b>Medicare</b> A US health insurance programme for US citizens aged 65 or older, US citizens under age 65 with certain disabilities and US citizens of all ages with permanent kidney failure requiring dialysis or a kidney transplant. Recently, Medicare began offering prescription drug coverage under Part D of the Medicare Prescription Drug Benefit Program.	<b>ROW</b> Rest of World.	
<b>moving annual total (MAT)</b> A figure that represents the financial value of a variable for 12 months.	<b>second-line treatment</b> Treatment administered after the failure of, or in addition to, first-line therapy.	
<b>new chemical entity (NCE)/new molecular entity (NME)</b> A new, pharmacologically-active substance. The term is used to differentiate from line extensions and existing drug products. NCE is a term referring to chemical substances whereas NME covers all modalities.	<b>Securities and Exchange Commission (SEC)</b> US governmental agency that regulates the securities industry/stock market.	
<b>new drug application (NDA)</b> An application to the US Food and Drug Administration for approval to market a new medicine in the US.	<b>Senior Executive Team (SET)</b> Team of heads of the various AstraZeneca functions.	
<b>NYSE</b> New York Stock Exchange.	<b>SG&amp;A costs</b> Selling, general and administrative costs.	
<b>operating costs</b> Distribution costs, research and development costs and selling, general and administrative costs.		
<b>operating profit</b> Sales, less cost of sales, less operating costs, plus operating income.		
<b>Ordinary Shares</b> Ordinary Shares of \$0.25 each in the capital of the Company.		

#### TRADE MARKS

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#### USE OF TERMS

In this Annual Report and Form 20-F Information, unless the context otherwise requires, 'AstraZeneca', 'the Group', 'we', 'us' and 'our' refer to AstraZeneca PLC and its consolidated entities.

#### STATEMENTS OF DATES

Except as otherwise stated, references to days and/or months in this Annual Report and Form 20-F Information are references to days and/or months in 2008.



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