



1999 Annual Report
and Form 20-F

AstraZeneca 

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In April 1999, Astra AB and Zeneca Group PLC merged to form AstraZeneca, one of the world's leading pharmaceutical and agrochemical companies, which provides innovative, effective products to improve health, nutrition and quality of life worldwide. The company is research and technology intensive, with extensive international development and marketing skills. Its healthcare business is strategically focused on seven major therapeutic areas: gastrointestinal, oncology, pain control and anaesthesia, cardiovascular, central nervous system, respiratory and infection. Zeneca Agrochemicals provides crop protection products designed to improve crop yields and food quality.

Cautionary statement regarding forward-looking statements

In order to utilise the 'Safe Harbor' provisions of the United States Private Securities Litigation Reform Act of 1995, AstraZeneca is providing the following cautionary statement. This Annual Report and Form 20-F 1999 contains forward-looking statements with respect to the financial condition, results of operations and businesses of AstraZeneca. By their nature, forward-looking statements and forecasts involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results and developments to differ materially from that expressed or implied by these forward-looking statements. These factors include, among other things, exchange rate fluctuations, the risk that research and development will not yield new products that achieve commercial success, the impact of competition, price controls and price reductions, the risk of loss or expiration of patents or trade marks, difficulties of obtaining and maintaining governmental approvals for products, the risk of substantial product liability claims, exposure to environmental liability and the risks related to the difficulty of integrating Astra's and Zeneca's large and complex businesses on a timely basis and realising synergies.



- n Merger of equals delivers profit growth and market share gains in its first year
- n Group sales up 9%; up 17% for ongoing operations
- n Group operating profit up 12%; up 20% for ongoing operations (before exceptional items)
- n Group earnings per share up by 14%; up 22% for ongoing operations (before exceptional items)
- n Pharmaceutical sales up 18%
- n US pharmaceutical sales up 23%
- n Rapid and effective integration. Synergies of \$130 million exceed \$100 million target for 1999
- n Further record sales of \$5.9 billion for *Losec*, for gastric acid-related diseases
- n Performance of newer products such as *Casodex* (+41%), *Atacand* (+312%) and *Seroquel* (+254%) represent very positive pointers for the future
- n Filing for marketing approval in Europe and US of *Nexium* which offers significant clinical improvements over *Losec*
- n Other new products are progressing well through development towards the market, including: ZD4522, treatment of lipid disorders; H376/95 and melagatran, thrombin inhibitors; *Viozan* and *Symbicort*, respiratory therapies; *Faslodex* and *Iressa*, anti-cancer treatments; and *Zendra*, treatment of stroke
- n Restructuring of pharmaceutical research and development to create an integrated, globally managed organisation which is therapy area led, project driven and focused on important commercial targets and real medical needs
- n *Amistar* now the world's largest selling proprietary fungicide (sales up over 40%)
- n Announcement of agreement to merge the Zeneca Agrochemicals business with the agrochemicals and seeds businesses of Novartis to create the world's first global, dedicated agribusiness, Syngenta
- n Successful completion of sale of Zeneca Specialties for \$2 billion

All growth rates quoted on pages 1-34 are on a pro forma basis and at constant currency, unless otherwise stated.

Product names in italics indicate trade marks owned by the AstraZeneca group of companies, except as otherwise stated. AstraZeneca, the AstraZeneca logotype and the AstraZeneca symbol are all trade marks of the AstraZeneca group of companies.

Financial Highlights

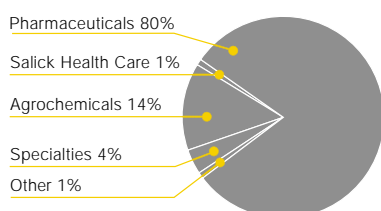
OPERATIONS BEFORE EXCEPTIONAL ITEMS

	Actual 1999	Pro Forma 1998	Constant Currency %
Sales \$m			
Group	18,445	17,117	+ 9
Continuing (excluding Specialties) ¹	17,791	15,823	+ 13
Ongoing (excluding Specialties and Agrochemicals) ²	15,134	13,033	+ 17
Operating Profit \$m			
Group	3,908	3,507	+ 12
Continuing (excluding Specialties) ¹	3,837	3,361	+ 15
Ongoing (excluding Specialties and Agrochemicals) ²	3,570	3,002	+ 20
Earnings per share \$			
Group	1.54	1.36	+ 14
Group (Statutory FRS3)	0.64	1.47	
Continuing (excluding Specialties) ¹	1.51	1.30	+ 17
Ongoing (excluding Specialties and Agrochemicals) ²	1.41	1.17	+ 22

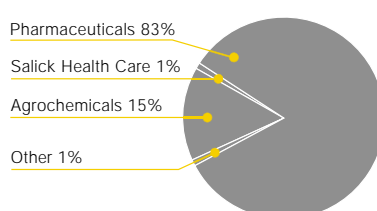
¹ Following the completion of the sale of Zeneca Specialties on 30 June 1999, the results for AstraZeneca on a continuing basis exclude the results of Zeneca Specialties.

² Following the announcement on 2 December 1999 of the proposed spin-off of Zeneca Agrochemicals and its subsequent merger with the crop protection and seeds activities of Novartis to form Syngenta AG, the results for AstraZeneca on an ongoing basis exclude the results of Zeneca Agrochemicals and Zeneca Specialties.

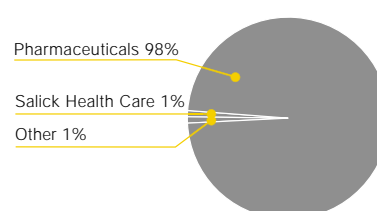
GROUP SALES 1999



CONTINUING SALES 1999



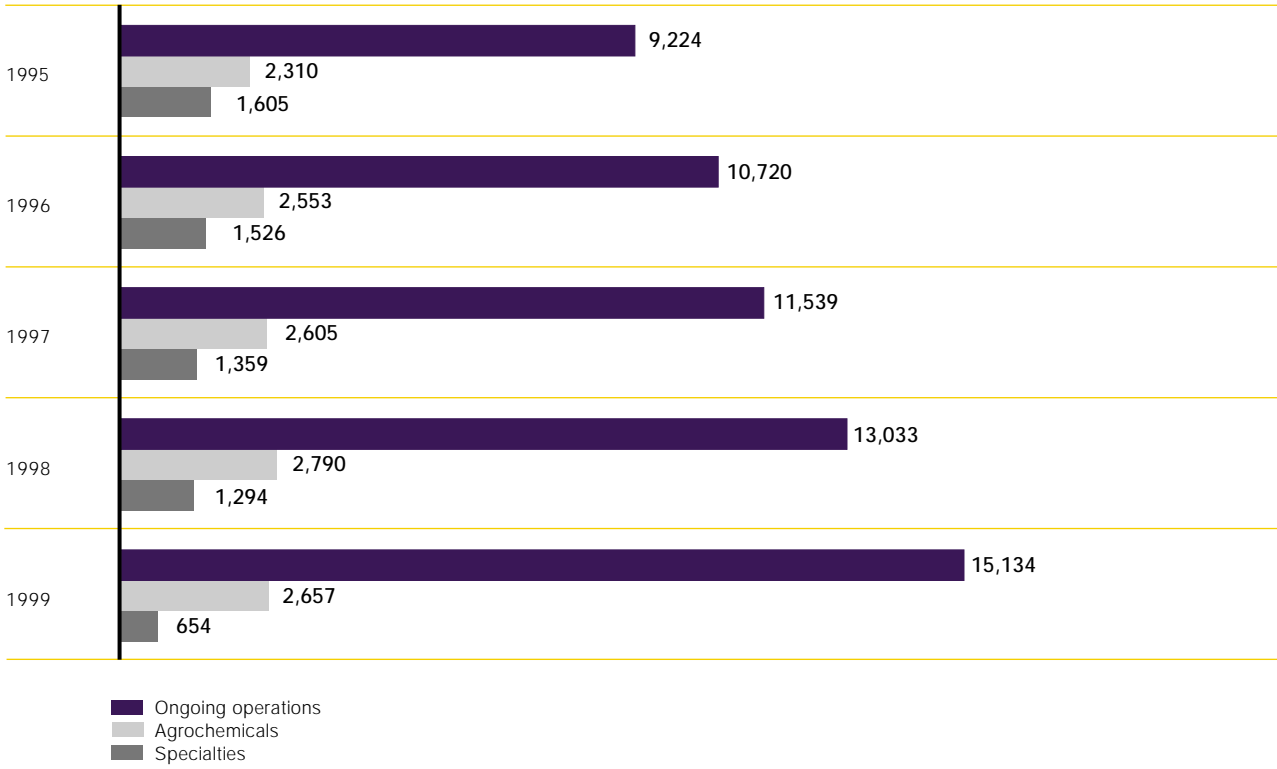
ONGOING SALES 1999





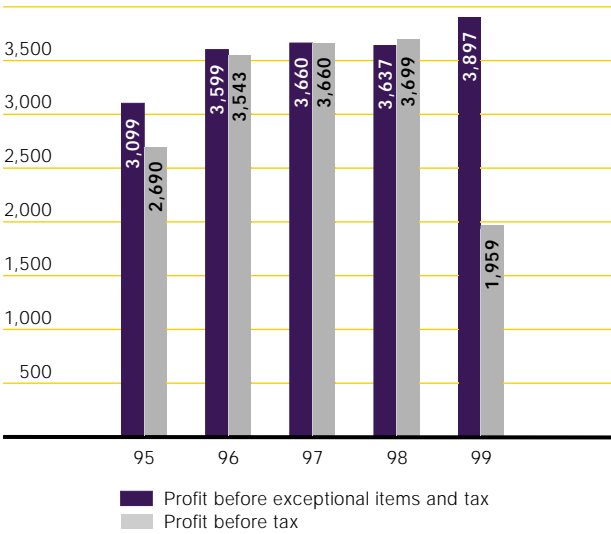
**FIVE YEAR PROGRESSION:
EXTERNAL SALES \$m**

Pro forma basis



**FIVE YEAR PROGRESSION:
PROFIT \$m**

Actual basis



**FIVE YEAR PROGRESSION:
EARNINGS PER ORDINARY SHARE \$**

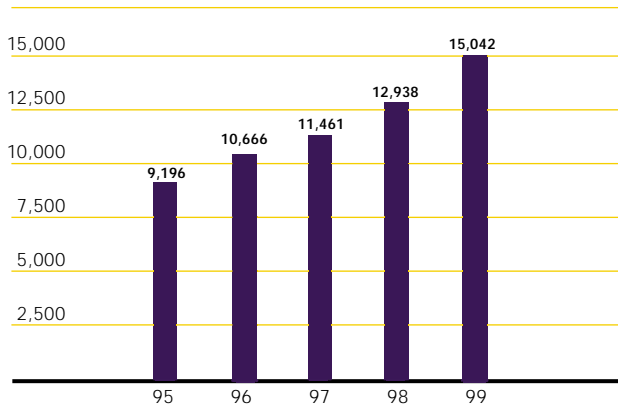
Actual basis



Financial Highlights

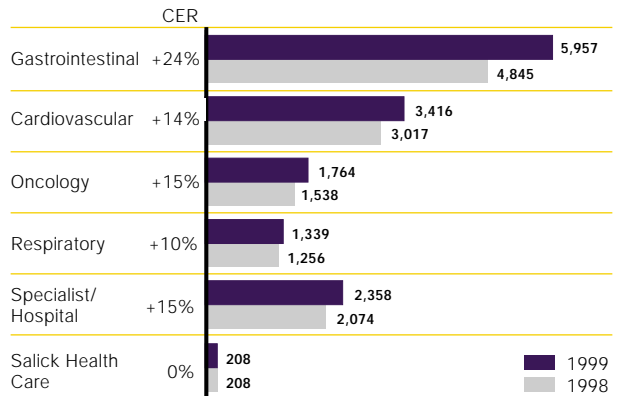
HEALTHCARE SALES \$m

Pro forma combined



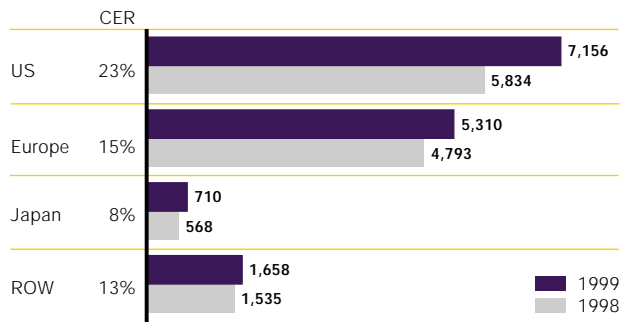
HEALTHCARE SALES BY THERAPEUTIC AREA \$m

Pro forma combined



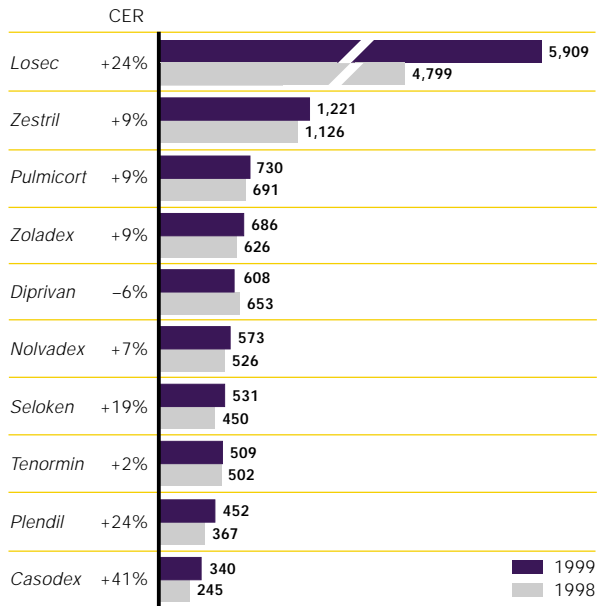
PHARMACEUTICAL SALES BY CUSTOMER LOCATION \$m

Pro forma combined



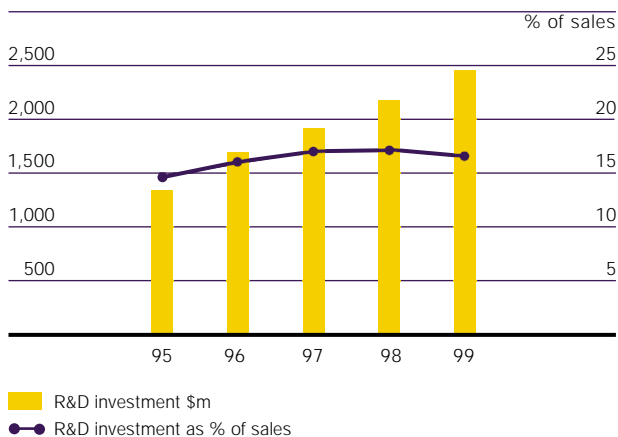
SALES OF MAJOR PHARMACEUTICAL PRODUCTS \$m

Pro forma combined



PHARMACEUTICAL R&D INVESTMENT \$m

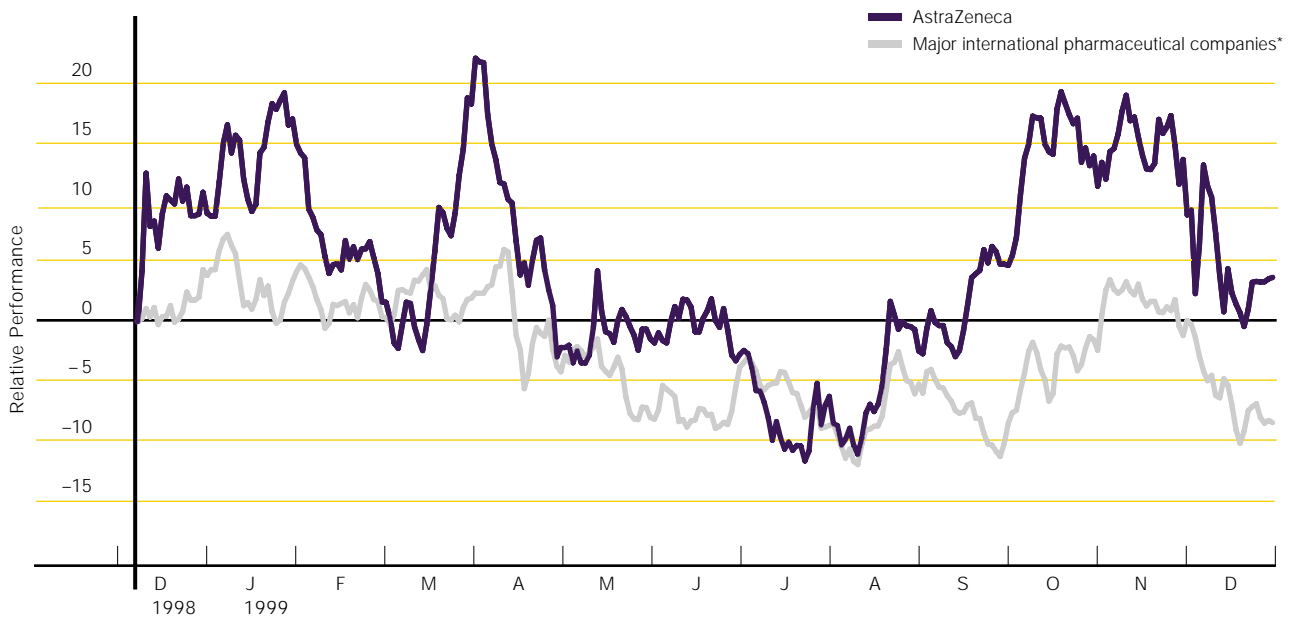
Pro forma combined





ASTRAZENECA RELATIVE SHARE PERFORMANCE

7 December 1998 – 31 December 1999



*Abbott Labs, AHP, Aventis, BMS, Eli Lilly, GW, Johnson & Johnson, Merck, Merck KGaA, Monsanto, Novartis, Novo Nordisk, Pfizer, Pharmacia & Upjohn, Roche, Sanofi-Synthelabo, Schering AG, Schering-Plough and SB

Source: Datastream

SHARE DIVIDEND FOR 1999

	Per share	Payment date
	\$	
First interim dividend	0.23	25 October 1999
Second interim dividend	0.47	17 April 2000

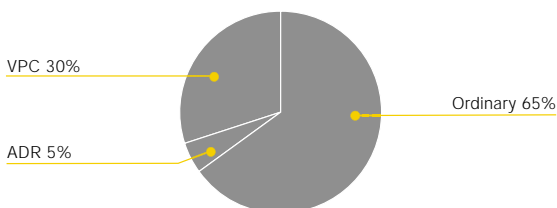
ASTRAZENECA'S LARGEST SHAREHOLDERS

Shareholder	Number of shares*	Issued share capital %
The Capital Group Companies, Inc.	138,837,853	7.8%
Investor AB	91,545,308	5.2%

*Notified interest as at 14 March 2000 (for further details, see page 135)

ASTRAZENECA REGISTERED SHAREHOLDER PROFILE

At 31 December 1999



Key:
 VPC: Ordinary Shares held via VPC AB, the Swedish securities register
 ADR: American Depositary Receipts
 Ordinary: Ordinary Shares held directly

This data is based on the statutory register of members and consequently under-represents US ownership as some US investors hold Ordinary Shares through a foreign registered nominee company.

Chairman's Statement

As Chairman of AstraZeneca, it gives me great pleasure to report on the impressive progress that has been made in establishing a new and vibrant player in the global pharmaceuticals market.

I have some experience of the challenges associated with mergers and am fully aware of the pitfalls that lie in wait for the unwary. In any industry, a successful integration depends on clarity of purpose, clear leadership and, above all, speed. Cross-border mergers easily give rise to nationality tensions as restructuring takes place and new responsibilities are defined. The Chief Executive, Tom McKillop, and his executive team have set the tone and achieved a remarkable spirit and sense of unity within AstraZeneca. What has been achieved is impressive by any standards. It is all the more satisfying to recognise that the business has continued to flourish during this period of great change.

Both Astra and Zeneca were great companies in their own right, proud of their histories, with strong, independent cultures and each was intent on building a better future. Twelve months on, a more powerful entity is emerging which incorporates much that was good from its predecessors but with a new and different approach and style. AstraZeneca is now intent on establishing itself as one of the leaders in the industry.

At the start of the year we identified opportunities, across the organisation, for rationalisation which was required in order to create the efficiency and effectiveness needed to deliver industry-leading performance. The management team has addressed this challenge head on and is now in a position to be able to see the benefits of scale, both in the delivery of the promised synergy benefits to the bottom line and, more importantly, in the emergence of an organisation which will be able to compete with the best in the industry.

The business performed well during 1999, meeting or exceeding expectations. Group sales increased by 9%, with operating profit before exceptional items growing by 12%. Earnings per share before exceptional items increased by 14% to \$1.54. Synergies of \$130 million out of the target of \$1.1 billion have been delivered and AstraZeneca's financial performance will continue to improve as a well planned process of integration continues to deliver its benefits. The second interim dividend of \$0.47 per Ordinary Share, which will be paid on 17 April 2000, brings the dividend for the full year to \$0.70.

In August 1999, we announced our intention to maintain a distribution policy which includes both a regular dividend cash flow and a share repurchase component to give the

company more flexibility in managing its capital structure over time. The share repurchase programme started towards the end of 1999 with the buy-back of 4,338,444 Ordinary Shares for an aggregate sum of \$183 million. The programme will continue in 2000 with further repurchases being made.

The requirement to undertake global restructuring within the pharmaceuticals business has not deflected the executive team from its objective of converting AstraZeneca from a bio-science business into an essentially pure healthcare company. This strategy was seen as the most effective way to realise the intrinsic value of the company's specialty chemicals and agrochemicals businesses, leaving a pharmaceuticals business of impressive size and global reach to pursue its objectives single-mindedly. The completion during 1999 of the sale of the Zeneca Specialties businesses for \$2 billion and, latterly, the announcement of the intention to merge the Zeneca Agrochemicals business with the agrochemicals and seeds businesses of Novartis to create Syngenta takes AstraZeneca well down its chosen road.

AstraZeneca's achievements in 1999 are a tribute to the excellent performance by Tom McKillop and the Senior Executive Team, the good working relationship with the Board and the skills, quality and enthusiasm of employees. The new business is undoubtedly off to a very good start and I am certain that it can fulfil its aim of becoming a true leader in its field.

I would like to thank all my colleagues on the Board and the Senior Executive Team for the key contribution they have made. Thanks are also due to the Directors of the former Astra and Zeneca companies who retired earlier this year; their contributions over the years are very much appreciated.

Finally, on behalf of the Board, I would like to thank, firstly, AstraZeneca employees throughout the world without whose skill and dedication we would have failed and, secondly, our shareholders for their faith in our ability to succeed. We fully intend to reward that faith by continuing to deliver true value.



Percy Barnevik
Chairman



1999 has been a year of great challenge and excitement. We set out with ambitious goals and have met or exceeded these. The merger was completed in record time, a new, single, integrated organisation has been put in place and the group's portfolio of businesses has been restructured to focus on healthcare. AstraZeneca increased its market share of the world pharmaceuticals' market in 1999, a first for a pharmaceuticals merger of this size.

Achievements such as these are a testament to the energy and creativity of all my colleagues in AstraZeneca and I would like to thank every employee for their commitment and contribution.

At group level, good financial growth has been achieved with sales up 9% and operating profit before exceptional items up 12%, primarily driven by the performance of the ongoing businesses which achieved a 17% increase in sales and a 20% increase in operating profits over the full year.

The pharmaceuticals business showed sales growth of 18% and profits growth before exceptional items of 19%. *Losec/Prilosec* sales of \$5.9 billion continued to make a major contribution with sales growth of 24% and the performance of newer products such as *Casodex* (up 41%), *Atacand* (up 312%) and *Seroquel* (up 254%) represent very positive pointers for the future. The strong sales growth in the US of 23% reflects our commitment to the world's most important market for pharmaceuticals.

The agrochemicals business, soon to become an integral part of Syngenta, showed a sales and profits decline of 5% and 21% respectively as poor trading conditions in the Americas impacted performance. *Amistar* continues to excel, posting a sales increase of over 40% during the year, to become the largest proprietary fungicide in the industry.

I want AstraZeneca to be one of the world's great companies through leading innovation and the delivery of value to all our stakeholders, be they patients, customers, the communities in which we work, shareholders or employees. We are privileged to have the opportunity to make a difference to human health and we take our obligation seriously.

Our strategy is clear, to grow the value of the company through serving the needs of customers and, in particular patients, with new, effective treatments for disease. Likewise, the immediate business priorities are established and are being actively addressed. Speedy completion of the integration is a high priority. Excellent progress has been made towards this and we are increasingly confident of delivering the \$1.1 billion of synergies envisaged at the time of announcing the merger.

It is essential that we realise the full sales potential of our established product range, in particular those products

launched in the last five years such as *Casodex*, *Atacand* and *Seroquel*. Equally, we must realise the potential of our new R&D products. *Nexium* will deliver improved customer value in the treatment of acid-related gastrointestinal disease and our portfolio of late stage development compounds includes several other products of substantial potential. We are particularly excited about the prospects for the superstatin ZD4522 for the treatment of lipid disorders, *Viozan* for chronic obstructive pulmonary disease, melagatran and H376/95 for thrombosis and *Iressa* for cancer. All of these products are on track to reach the market by 2002, with the first launches of *Nexium* scheduled within the next few months.

Our research base has been strengthened by the creation of centres of excellence in Sweden and the UK and an expansion of research in America in line with our objective of 'winning in the US'. More effort is also being committed both in-house and via collaborations to establish leading positions in those key enabling technologies which will give competitive advantage.

Our first Annual Report as AstraZeneca is also the first of a new millennium and this year, more than ever, it is appropriate for us to consider the broader environment in which we operate. It is clear that change, paradoxically, is the only constant. We stand on the threshold of a technological revolution in our science base, driven by the potential of pharmacogenetics and genomics. At the same time the explosion of the Internet and e-commerce has the potential to change for ever the nature of our customer base and the way we communicate and do business with them. Add to this a degree of political uncertainty as governments worldwide wrestle with the growing problem of matching their ability to fund healthcare with inexorably increasing demand and we have a complex and challenging picture.

The R&D based pharmaceutical industry, in partnership with governments, regulators and healthcare providers, is well positioned to provide solutions which deliver improved healthcare and quality of life.

In AstraZeneca, we face the future with confidence, ready to embrace the challenges. I feel proud and privileged to have been appointed AstraZeneca's first Chief Executive. I believe we have the people and products to deliver an industry leading performance and in so doing create one of the world's great enterprises.

A handwritten signature in black ink, reading 'Tom McKillop', is written over a horizontal line.

Tom McKillop
Chief Executive

Operational Review

GROUP STRATEGY

As a research and development based company dedicated to improving health and the quality of life, AstraZeneca will serve the best interests of its shareholders by effectively meeting the needs of its customers and, in particular, patients.

During 1999, AstraZeneca took the actions necessary to optimise the future development of each of its businesses. Zeneca Specialties was sold in a buyout jointly financed by Cinven and Investcorp, putting that business in a better position to achieve future growth within its own sector. Plans have also been announced to spin off and merge Zeneca Agrochemicals with the agrochemicals and seeds business of Novartis to form Syngenta, which will become the world's largest, free-standing, agribusiness.

This will leave AstraZeneca positioned as a pure health-care company with a primary focus on pharmaceuticals. AstraZeneca's pharmaceuticals' sales of \$14.8 billion in 1999 made it one of the world's largest pharmaceutical companies. Its research investment of \$2.5 billion also places it amongst the largest in the industry. The company has the products and pipeline required to build for the future.

The core of AstraZeneca's strategy is the application of science and technology to deliver a continuous flow of effective new products, designed to meet the needs of healthcare providers and patients; products which deliver true value in the treatment of disease.

AstraZeneca intends to use its leading position in many important areas of medicine to make a difference to the lives of patients and the healthcare professionals who treat them. The company will strive to be first with new ideas and innovative in all areas of the business in order to create value for its customers, shareholders, employees and the communities in which it works.

AstraZeneca's business priorities are:

Customer focus

In all aspects of the company's enterprise, the needs of the customer will be paramount.

Fast, effective integration

AstraZeneca is committed to the completion of the work required to integrate its two predecessor companies into a single, coherent new organisation. It is creating an efficient, effective company, capable of competing with the best and delivering the synergy benefits promised at the time of the merger.

Growth through key products

The growth of the business through the next decade will be fuelled by ensuring optimal market shares for AstraZeneca's range of existing products, coupled with the successful introduction of the new products in late stage development.

Winning in the US

Such is the importance of the US market that special focus is being given to the growth of the US business as a critical, integrated part of the global organisation. The strategy includes major investments in R&D in the US.

Secure the flow of new products

Increasing efforts are being devoted to the application of leading-edge science and technology to improve the quality and efficiency of the drug discovery process, thereby providing a strong flow of high potential candidates for development as new medicines. AstraZeneca's in-house work is complemented by an extensive network of collaborations with leading academic centres and biotechnology companies in addition to an active in-licensing programme.

Build the talent base

The company aims to attract and retain the best talent. This will be done by building a culture which values, recognises and rewards outstanding performance in all aspects of its business.

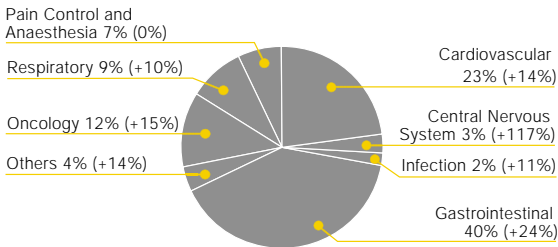


ASTRAZENECA IN HEALTHCARE PHARMACEUTICALS

AstraZeneca is one of the world's leading pharmaceutical companies. Its key skills lie in inventing, developing and commercialising innovative products which are designed to fight disease in important areas of medical need.

ASTRAZENECA 1999: PHARMACEUTICAL SALES BY THERAPEUTIC AREA

Value: \$14.8 billion (+18%)



Figures in brackets show sales growth at constant exchange rates.

The company focuses on seven major therapeutic areas: gastrointestinal, cardiovascular, oncology (anti-cancer), respiratory, central nervous system, pain control and anaesthesia, and infection. This emphasis enables AstraZeneca to build up teams with scientific, medical, regulatory and customer expertise within disease areas, thereby capitalising on the breadth of experience of its workforce and its existing product base. Major products include: the world's largest selling pharmaceutical, *Losec/Prilosec*, for gastric acid-related diseases; the most widely prescribed ACE inhibitor in the US, *Zestril*; Europe's leading asthma treatment, *Pulmicort*; *Zoladex* and *Nolvadex* which are leading treatments for prostate and breast cancer respectively; the world's largest selling cardioselective beta-blocker, *Seloken*; and *Diprivan* and *Xylocaine*, the world's largest selling general and local anaesthetics respectively.

Highlights for 1999 include:

- n Sales in 1999 were \$14.8 billion, an 18% increase over 1998
- n US pharmaceutical sales up 23%
- n Further record sales of \$5.9 billion for *Losec*
- n Performance of newer products such as *Casodex* (+41%), *Atacand* (+312%) and *Seroquel* (+254%) represent very positive pointers for the future
- n Filing for marketing approval in Europe and US of *Nexium* which offers significant clinical improvements over *Losec*
- n Other new products are progressing well through development towards the market including: ZD4522, treatment of lipid disorders; H376/95 and melagatran, thrombin inhibitors; *Viozan* and *Symbicort*, respiratory therapies; *Faslodex* and *Iressa*, anti-cancer treatments; and *Zendra*, treatment of stroke

Industry background

The world market for pharmaceuticals in 1999 was estimated to be worth \$270 billion with the US, Japan and Western Europe accounting for around 85% of this. Sales of pharmaceuticals have increased steadily over the last decade due to a combination of factors including the ageing population in developed countries and the introduction of innovative products which represent significant advances in disease therapy and patient care.

AstraZeneca believes that, although the underlying factors driving industry growth still pertain, issues such as continuing price constraint, the escalating cost of R&D, increasing regulatory pressures, the rise of e-commerce and the ability to use powerful new methods of communication and information sharing will make the pharmaceutical industry intensely competitive. The most successful pharmaceutical companies will have a combination of innovative research, rapid product development, cost-effective production and global marketing expertise.

Integration

The process of integration, which was initiated immediately after completion of the merger, set out to create a new business model for the combined entity which would enable AstraZeneca to compete effectively in its markets and deliver cost synergies of \$1.1 billion by the end of 2001, in line with commitments made at the announcement of the intention to merge in December 1998.

By the end of 1999, significant progress had been made: AstraZeneca was operating as a single company with a unified management structure and reporting systems. Management systems were in place to support effective decision-making across the business. In all countries where both predecessor companies had sales and marketing organisations, unified management was in place, locations selected and the majority of field forces integrated, with sales activity redirected to support the merged product portfolio. Rationalisation of manufacturing arrangements was well advanced (see page 24) and, following substantial analysis, a new R&D strategy was announced (see page 21). A total of 2,800 job reductions were made during 1999 and cost savings of \$130 million were delivered against the \$100 million target for 1999.

Much remains to be done to achieve the full \$1.1 billion synergy target and organisational efficiencies envisaged, but plans are well advanced across the business to deliver the promised benefits. The central integration office, established to design and implement the creation of the new company, has now finalised its work and the responsibility for remaining integration work rests with AstraZeneca's new line management. A total of \$864 million of costs (\$548 million synergy-related and \$316 million integration-related) have been clearly identified and charged as exceptional items in 1999.

Major Pharmaceutical Products

TRADE MARKS	COMPOUND	MAIN USES
Gastrointestinal		
<i>Losec/Prilosec</i>	omeprazole	Proton pump inhibitor for peptic ulcer, reflux oesophagitis, heartburn and dyspepsia
<i>Losec MUPS</i>	omeprazole	Omeprazole in a Multiple Unit Pellet System tablet formulation
<i>Entocort</i>	budesonide	Anti-inflammatory for inflammatory bowel diseases, such as ulcerative colitis and Crohn's disease
Cardiovascular		
<i>Atacand</i> ¹	candesartan cilexetil	Angiotensin II type 1 (AT ₁)-receptor blocker for hypertension
<i>Zestril</i> ²	lisinopril	ACE (angiotensin converting enzyme) inhibitor for hypertension, heart failure, acute MI and renal and retinal complications of diabetes
<i>Zestoretic</i> ²	lisinopril/hydrochlorothiazide	ACE inhibitor and diuretic combination for hypertension
<i>Seloken ZOK/Toprol-XL</i>	metoprolol CR/XL	Beta-blocker for hypertension, angina, MI, migraine and other uses
<i>Tenormin</i>	atenolol	Beta-blocker for hypertension, angina, MI and other uses
<i>Plendil</i>	felodipine	Calcium antagonist for hypertension and angina
<i>Imdur</i>	isosorbide-5-mononitrate	Nitrate in a <i>Durules</i> formulation for angina
Oncology		
<i>Zoladex</i>	goserelin	LHRH analogue administered as a subcutaneous implant for prostate and pre-menopausal breast cancer, certain benign gynaecological disorders and assisted reproduction
<i>Casodex</i>	bicalutamide	Anti-androgen for prostate cancer
<i>Arimidex</i>	anastrozole	Aromatase inhibitor for advanced breast cancer in post-menopausal women
<i>Tomudex</i>	raltitrexed	Cytotoxic agent for advanced colorectal cancer
<i>Nolvadex</i>	tamoxifen	Anti-oestrogen for all stages of breast cancer treatment
Respiratory		
<i>Pulmicort</i>	budesonide	Inhaled anti-inflammatory for control of asthma*
<i>Oxis</i>	formoterol	Inhaled long acting bronchodilator for relief of asthma symptoms*
<i>Bricanyl</i>	terbutaline	Inhaled short acting bronchodilator for relief of asthma symptoms*
<i>Rhinocort</i>	budesonide	Topical nasal anti-inflammatory for control of rhinitis*
<i>Accolate</i>	zafirlukast	Oral leukotriene receptor antagonist for control of asthma
CNS		
<i>Seroquel</i>	quetiapine	Atypical anti-psychotic for schizophrenia and other psychotic disorders
<i>Zomig</i>	zolmitriptan	5-HT _{1B/1D} receptor agonist for acute treatment of migraine with or without aura
Pain Control and Anaesthesia		
<i>Diprivan</i>	propofol	Intravenous general anaesthetic for induction/maintenance of anaesthesia and sedation of intensive care patients
<i>Naropin</i>	ropivacaine	Local anaesthetic for surgical anaesthesia and acute pain management
<i>Xylocaine</i>	lidocaine	Local anaesthetic for use in surgery and dentistry
<i>EMLA</i>	lidocaine & prilocaine	Topical local anaesthetic for use prior to needle insertion and minor surgery
Infection		
<i>Merrem/Meronem</i> ³	meropenem	Ultra broad spectrum antibiotic injection for a wide range of serious infections including meningitis
<i>Apatef/Cefotan</i> ⁴	cefotetan	Antibiotic injection for prophylaxis and treatment of bacterial infections
<i>Hibitane</i>	chlorhexidine	Skin antiseptic for a variety of hospital and other uses

*Available as *Turbuhaler* dry powder inhaler

¹ Product under licence from Takeda Chemical Industries Ltd.

² Product under licence from Merck & Co., Inc.

³ Product under licence from Sumitomo Pharmaceuticals Co., Ltd.

⁴ Product under licence and trade marks owned by Yamanouchi Pharmaceutical Co., Ltd.

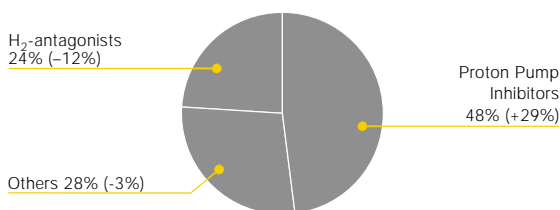


Product Review by Therapy Area Gastrointestinal (GI)

Between 5% and 10% of the world's population suffer at some point in their lives from duodenal or gastric ulcers, and in the Western world, some 40% of the adult population experience heartburn, the principal symptom of gastro-oesophageal reflux disease (GERD), at least once a month. AstraZeneca is a world leader in the R&D, production and marketing of pharmaceuticals designed to combat these acid-related diseases.

WORLD MARKET 1999: TREATMENTS FOR GASTRIC ACID-RELATED DISEASES

Value: \$18 billion (+7%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key GI Products

Losec (Prilosec in the US). Launched in 1988, *Losec* was the first in a new class of drugs, the proton pump inhibitors (PPI), which provide highly effective control of gastric acid secretion. *Losec* offers a rapid and more efficacious resolution of symptoms, and improved response rates over H₂-receptor antagonists. During more than a decade of use in over 400 million patient treatments in over 100 countries, and through data from extensive clinical trials, *Losec* has become established as the gold standard for treatment of acid-related diseases. It is approved for the acute and long-term treatment of reflux oesophagitis, the treatment of symptomatic GERD, dyspepsia, peptic ulcer disease, NSAID-associated upper gastrointestinal disorders and paediatric reflux oesophagitis. Additionally, in combination with two antibiotics (triple therapy), it is the leading treatment for the eradication of *Helicobacter pylori* bacteria (*H. pylori*) which cause some 80% of peptic ulcers.

In addition to the original capsule formulation, *Losec* is also now available in a new tablet formulation, the Multiple Unit Pellet System (MUPS), which gives patients and physicians increased convenience, flexibility and predictability. This is already available in 19 countries with further launches planned.

Losec is the world's largest selling pharmaceutical, with sales of \$5.9 billion in 1999, an increase of 24% over 1998. This excellent growth indicates the continuing strength of demand for the product in a very competitive market.

Omeprazole, the active substance in *Losec*, is covered by substance patents which began to expire in 1999. Patent term extensions or supplementary protection certificates

(SPCs) have been granted on the substance in most countries which extend coverage to April 2001 in the US, to 2002–2004 in most of Europe and to 2004 in Japan. In the US, AstraZeneca has reached agreement on a paediatric clinical programme with the FDA and initiated all required clinical studies. These are scheduled for completion in Q4 2000. AstraZeneca is discussing additional requirements with the FDA, but expects to file the paediatric submission in December 2000 leading, if successful, to a further six months' marketing exclusivity in the US. In addition to the substance patents for *Losec*, its intermediates, salts, formulations and indications, and the manufacturing process for omeprazole, are covered by patents which expire between 2003 and 2014. AstraZeneca is committed to asserting its patent rights. (For further details on the *Losec* patent position, see page 108).

In January 1999, AstraZeneca re-acquired all rights to market omeprazole in Italy and Spain under the trade mark *Losec*.

Entocort. *Entocort* is a locally acting topical steroid for the treatment of inflammatory bowel diseases such as ulcerative colitis and Crohn's disease. It is as effective as systemically acting steroids but with significantly less side-effects, and more effective than 5-ASA (amino salicylic acid) preparations, but with a comparable side-effect profile.

GI R&D Portfolio

Nexium is the first PPI to offer significant clinical improvements over *Losec* in terms of bioavailability, acid control, efficacy and predictability. *Nexium* is the first PPI developed as an optical isomer. Clinical trial data show that, in the treatment of reflux oesophagitis, *Nexium* healed more patients in a shorter period of time than *Losec*. One week of *Nexium* triple therapy healed *H. pylori* associated duodenal ulcers without the need for follow up anti-secretory monotherapy.

Nexium was filed for marketing approval in Europe and the US at the end of 1999 after successfully completing a fast and comprehensive development programme involving more than 15,000 patients and covering six indications, including short and long-term treatment of GERD and the management of *H. pylori* associated with peptic ulcer disease. The global launch of *Nexium* is expected to start in the second half of 2000 and will be followed by further lifecycle development to maximise the product value to customers.

Other GI R&D. AstraZeneca has made a major commitment to continued investment in the GI area. It has ongoing R&D projects for acid-related disease, *H. pylori* eradication, inflammatory bowel disease and irritable bowel syndrome.

As a result of project prioritisation, the mosapride licence with Dainippon Pharmaceutical Co., Ltd. was terminated in December 1999 by agreement, at Dainippon's request.

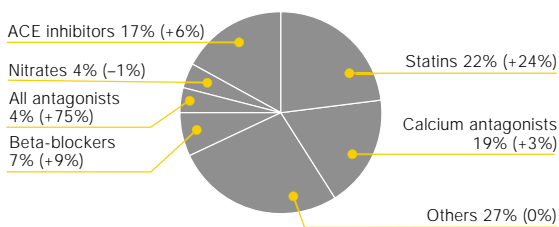
Operational Review

Cardiovascular (CV)

Cardiovascular and cerebrovascular disease present the greatest risk to life for most adults, accounting for at least 15 million deaths globally each year – approximately 30% of all mortality. The most common cardiovascular disorders are high blood pressure (hypertension), atherosclerosis, angina pectoris, myocardial infarction (MI), congestive heart failure (CHF) and cardiac arrhythmias.

With 40 years of experience in the CV area, AstraZeneca has a well established franchise and offers a broad portfolio of products targeted at this substantial area of clinical need which aim to decrease the risk, prevalence and impact of CV disease.

WORLD MARKET 1999: CARDIOVASCULAR THERAPIES Value: \$47 billion (+9%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key CV Products

Zestril. Initially introduced in 1988 for hypertension, *Zestril* is an ACE inhibitor. AstraZeneca's successful lifecycle management of the product has increased its range of indications to include acute MI, CHF and the renal and retinal complications of diabetes. *Zestril* is also marketed in combination with a diuretic as *Zestoretic*.

AstraZeneca continues to drive the growth of *Zestril* (9% improvement in sales in 1999 over 1998) and increase its market share which currently stands at 15%. With sales of \$1.2 billion in 1999, *Zestril* is the world's second largest selling ACE inhibitor and the most widely prescribed ACE inhibitor in the US.

Data from two new studies published in 1999 – ATLAS and STOP II – further support the clinical utility of *Zestril*. Results of the ATLAS trial showed that high doses of *Zestril* in patients with heart failure have significant benefits in reducing the combined risk of hospitalisation and death compared with low doses. Based on these results, AstraZeneca has gained regulatory approval for label amendments in several major markets.

Zestril is protected by patent in the US until December 2001 and a further six months' marketing exclusivity should be granted by the FDA if data from an ongoing paediatric programme are accepted. Patents expired in several countries, including Germany, Japan and Finland in late 1999. However, protection in many major markets such as the UK, France and Italy, is extended through SPCs with expiry dates between October 2002 (UK) and August 2009 (Italy).

Atacand. Developed in collaboration with Takeda Chemical Industries Ltd., *Atacand* is an angiotensin AT₁-receptor blocker, a relatively new, rapidly growing therapeutic class for the treatment of high blood pressure. *Atacand* was first launched in 1997 and is now available in over 25 countries including all major markets. Sales for *Atacand* in 1999 were \$171 million with sales in the US of \$58 million. Further growth is anticipated and *Atacand* is expected to become a significant contributor to AstraZeneca's CV business.

AstraZeneca is conducting an ongoing clinical development programme for *Atacand* aimed at extending its clinical utility. This programme includes major mortality studies in hypertension (SCOPE) and heart failure (CHARM). In addition, the company has developed *Atacand Plus/Atacand HCT*, a combination of *Atacand* with a diuretic for the treatment of hypertension, and launches in major markets are expected during 2000.

Atacand is protected by patents until 2011 and applications for patent term extensions and SPCs have been filed wherever possible. In most countries SPCs have been granted until 2012. *Atacand Plus* is protected by a US patent which expires in 2015.

Seloken ZOK (Toprol-XL in US). One of the first cardio-selective beta-blockers launched on the market, *Seloken ZOK* (including *Seloken*) is now the leading product in this class worldwide. Key to its continued growth has been the development of the once-daily controlled release formulation (ZOK) that improves efficacy and tolerability. *Seloken ZOK* is used to treat and reduce the risk of a wide range of CV diseases, including hypertension, MI, functional heart disturbances, sudden cardiac death, CHF and angina.

In October 1999, to comply with European Commission merger conditions, AstraZeneca divested to Searle exclusive rights in the European Economic Area to *Seloken Comp* (known as *Beloc ZOC Comp* in Germany), a fixed combination of metoprolol and the diuretic, hydrochlorothiazide.



AstraZeneca continues to develop *Seloken ZOK* and, based on the positive results of a recent study (MERIT-HF), filings have been submitted in the US and other countries for the approval of the additional indication of reduction of mortality and sudden death in patients with moderate to severe heart failure. *Seloken ZOK* is protected by patents in most major markets, with protection in the US extending to 2009.

Plendil is a vasoselective calcium antagonist with well established safety and efficacy for the treatment of hypertension and outside the US for angina pectoris. *Plendil* was selected as the baseline therapy in the landmark Hypertension Optimal Treatment (HOT) study, which has had a major influence on recommendations for the optimal treatment of hypertension in national and international guidelines. The patents protecting the active substance in *Plendil*, felodipine, started to expire in 1999 but it is still protected in the US and most major markets by patent term extensions and SPCs, providing continued market exclusivity until between June 2001 (US) and 2011 (Italy). In addition the formulation of *Plendil* is also protected by patents which expire between 2003 and 2007. Paediatric studies are ongoing in the US as a basis for a six months' marketing exclusivity extension from the FDA.

In January 1999, AstraZeneca re-acquired all rights to market felodipine in Italy and Spain under the trade marks *Prevox* and *Perfudal*.

Tenormin is the second largest selling beta-blocker worldwide, used to treat hypertension, ischaemic heart disease and abnormal heart rhythm. *Tenormin* line extensions include combinations with a diuretic (*Tenoretic*) and a calcium antagonist (*Nif-Ten*). Although patents for *Tenormin* have expired in all major markets, with sales of \$509 million in 1999, *Tenormin* continues to make a significant contribution to AstraZeneca's CV business.

In October 1999, Searle purchased distribution rights to *Tenormin* in Sweden and Norway following divestment of these rights by AstraZeneca to comply with European Commission merger conditions. AstraZeneca extended Searle's rights to cover *Tenormin* in Denmark and Finland, and *Tenoretic* in Denmark.

CV R&D Portfolio

AstraZeneca's ongoing CV R&D is aimed at bringing to market innovative new products that represent a significant advance over existing therapies in the areas of thromboembolism, dyslipidaemia, type II diabetes/insulin resistance syndrome, atrial fibrillation, and ischaemic heart disease. A key focus for

its CV R&D is the development of a strong anti-thrombosis portfolio, based on anti-coagulant and anti-platelet agents. The company is also committed to broadening the CV portfolio to include agents for the treatment of metabolic disorders which can have serious CV consequences.

ZD4522 is a HMGCoA reductase inhibitor licensed from Shionogi & Co. Ltd. This class of therapeutic agents, known as statins, lowers blood levels of lipids (including cholesterol) in persons at increased risk from morbidity and mortality caused by coronary heart disease. Today, statin use is one of the largest and most rapidly growing areas in the global pharmaceutical market. Preliminary data from the AstraZeneca Phase II development programme suggest that ZD4522 may have a therapeutic profile and dosing regimen offering potential advantages compared to the existing generation of approved statins. Phase III studies are ongoing with filing of a new drug application with the FDA planned for the second quarter 2001, and launch planned for the second half of 2002.

H376/95 is a novel, oral thrombin inhibitor in Phase III development for the prevention of deep vein thromboses following orthopaedic surgery, and in Phase II for the prevention of stroke in patients with atrial fibrillation. A new drug application with the FDA is planned for 2001, and launch is expected in 2002. H376/95 is likely to be the first new oral anticoagulant in 50 years. Preliminary data from the development programme suggest that H376/95 may offer significant improvements over currently available treatments such as warfarin and low molecular weight heparins.

Melagatran (the active metabolite of H376/95) is also a thrombin inhibitor in Phase III development in a parenteral form.

The development programme for ZD6169 in urinary incontinence was halted at the end of 1999 for failure to meet target criteria.

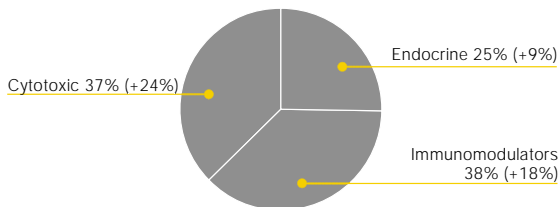
Operational Review

Oncology

Cancer is a devastating disease which caused over seven million deaths worldwide in 1998. The risk of cancer in older people is rising with the increase in life expectancy. Significant medical advances have been made and many cancers can now be treated, particularly if they are diagnosed early. AstraZeneca is one of the world's leading suppliers of anti-cancer medicines, led by its products *Casodex*, *Arimidex*, *Zoladex*, *Nolvadex* and *Tomudex*.

Anti-cancer medicines are broadly classified as endocrine, cytotoxic or immunomodulators. AstraZeneca is the world's leading supplier of endocrine medicines and offers a broad portfolio of anti-cancer products.

WORLD MARKET 1999: ANTI-CANCER THERAPIES
Value: \$15 billion (+18%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key Oncology Products

Zoladex, the second largest selling LHRH analogue worldwide, is used in the treatment of prostate cancer, breast cancer and gynaecological disorders. It lowers the levels of testosterone and oestradiol in the body, thereby reducing the risk of tumour growth and has been proven to be an effective, patient preferred, alternative to surgical castration in men and oophorectomy in women. *Zoladex* is available in over 100 countries, as a one-month depot or the more convenient three-month formulation, *Zoladex LA*. *Zoladex* sales for 1999 were \$686 million, an increase of 9% over 1998.

Patent protection for the active ingredient of *Zoladex* has started to expire but remains in the major markets of UK and France until 2001 and 2004 respectively. In addition, patent protection for the depot formulations does not expire until between 2002 and 2005 (US). The European patent covering these formulations is currently under appeal. Assuming reinstatement, it will expire in January 2002.

New indications have been introduced for *Zoladex* including its use in the treatment of pre- and peri-menopausal breast cancer, endometriosis, uterine fibroids, endometrial thinning and in assisted reproduction. Further studies are ongoing which demonstrate survival benefits in earlier stages of prostate cancer and efficacy in early breast cancer in pre-menopausal women. *Zoladex* is the only LHRH analogue with these data.

Nolvadex is the world's most commonly prescribed breast cancer medicine and the most widely accepted endocrine therapy in the treatment of early and advanced breast cancer in pre- and post-menopausal women. More than 10 million patient years of its use to treat breast cancer have demonstrated that this medication significantly reduces recurrences and prolongs overall patient survival.

Nolvadex continues to be the only drug registered in the US for the reduction of the incidence of breast cancer in women at high risk of developing the disease. A submission for regulatory approval was filed in the US in November 1999 for DCIS (Ductal Carcinoma in Situ). AstraZeneca's focused marketing in countries where the patent has expired, and vigorous defence of its US patent (which does not expire until August 2002), aim to ensure that this product continues to be important. (For further details on the *Nolvadex* patent position, see page 109).

Casodex is a well tolerated, orally administered anti-androgen with sales of \$340 million in 1999 showing good growth of 41% over 1998. First launched in 1995 for use in combination with surgical or medical castration in patients with advanced prostate cancer, *Casodex* 50mg is now available in over 80 countries worldwide and is the world's leading anti-androgen.

Casodex 150mg was first launched in the UK in 1999 as a monotherapy treatment for locally advanced prostate cancer. It is the first anti-androgen as monotherapy to offer men a more acceptable alternative to the currently available options of surgical or medical castration, both of which have significant quality of life issues. AstraZeneca believes that further approvals for *Casodex* 150mg monotherapy will lead to significant growth for this product.

Specially designed for the Japanese market, *Casodex* 80mg was launched there in 1999 where it achieved 20% market share after five months.

Casodex is part of the ongoing Early Prostate Cancer Programme, involving over 8,000 patients and representing the largest ever programme conducted in prostate cancer patients. Results are expected in 2001.



Arimidex. First launched in 1995, *Arimidex* is now the world's largest selling aromatase inhibitor. It prevents the synthesis of the hormone oestrogen and is used in the treatment of advanced breast cancer in post-menopausal women. It is available in the US, Europe and many other countries.

Arimidex has been shown to be at least as effective as *Nolvadex* in advanced disease, and in a North American study, with an efficacy advantage. These data have been submitted to regulatory authorities in Europe and the US to extend the *Arimidex* label. A regulatory submission for Japan was made in November 1999. Studies have been initiated in early disease to determine if *Arimidex* can be used instead of *Nolvadex* in adjuvant treatment of breast cancer.

Tomudex, the first of AstraZeneca's cytotoxic agents, is used as monotherapy treatment of advanced colorectal cancer and is approved in 36 countries. Clinical studies are ongoing with *Tomudex* in combination treatment of other tumour types, including mesothelioma.

Oncology R&D Portfolio

Building on its successful endocrine treatments, AstraZeneca is committed to further development of both endocrine and cytotoxic products and to a number of 'novel approaches', including anti-proliferates, anti-angiogenics and inhibitors of cancer invasion, to combat prostate, breast, colorectal, lung, gastric and other cancers.

Faslodex is the first of a new class of agents, a selective oestrogen receptor down-regulator (SERD), that pre-clinically showed greater efficacy and duration of response than *Nolvadex*. Phase III trials are ongoing for *Faslodex* as a monthly injection in the treatment of advanced breast cancer. Regulatory submissions are expected in 2000.

Iressa is an epidermal growth factor receptor (EGFR) tyrosine kinase inhibitor which acts to block signals for cancer growth and survival. It is being investigated in Phase II clinical trials in both monotherapy and combination against several tumour types including non-small cell lung cancer, gastric cancer and colorectal cancer. Promising efficacy has been demonstrated in early trials and Phase III studies are expected to begin in early 2000.

ZD0473 is a third generation cytotoxic platinum agent, licensed from Anormed Inc., designed to deliver an extended spectrum of anti-tumour activity and to overcome platinum resistance. Phase II trials are ongoing as an intravenous presentation for the treatment of solid tumours.

ZD9331, a cytotoxic antimetabolite that directly inhibits the thymidylate synthase enzyme, is in Phase II development, using both oral and intravenous presentations for the treatment of solid tumours.

ZD6126 is a vascular targeting agent, licensed from Angiogene in 1998. ZD6126 works by binding to tubulin, causing disruption to the internal architecture of the vascular endothelium, resulting in closure of the blood vessels and death of the tumour.

ZD6474 prevents growth of blood vessels into the tumour. It works through interacting with a trans-membrane receptor on the endothelial cell, which activates a tyrosine kinase that signals to the cell to divide. ZD6474 specifically blocks this cascade at the active site of the kinase.

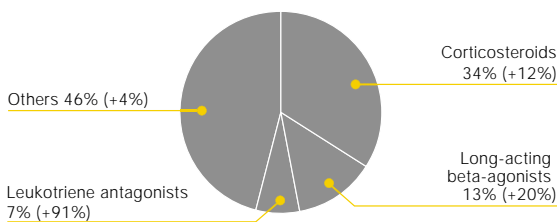
AstraZeneca agreed with Vivus Inc. in 1999 to terminate the distribution arrangement for alprostadil. The termination arrangements provide for continued distribution of the product by AstraZeneca in early 2000 as part of a programmed hand-back of the business.

Operational Review

Respiratory

Diseases of the respiratory system include several chronic and acute conditions such as asthma, bronchitis and rhinitis, that give rise to symptoms of varying degrees of severity. Deaths from severe respiratory diseases, including asthma and chronic obstructive pulmonary disease (COPD), have increased in recent years and account for 8% of deaths in the developed world. AstraZeneca markets a wide range of products and inhalation devices for the treatment of prevalent respiratory diseases such as asthma, rhinitis and chronic bronchitis and is committed to offering a strong respiratory product portfolio.

WORLD MARKET 1999: ANTI-ASTHMATICS Value: \$9 billion (+10%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key Respiratory Products

Turbuhaler. The *Turbuhaler* inhaler is a device which permits administration of active substances without the need for CFC or any other propellant. AstraZeneca currently markets five products using *Turbuhaler*: *Pulmicort Turbuhaler*, *Bricanyl Turbuhaler*, *Rhinocort Turbuhaler*, *Inspiryl Turbuhaler* and *Oxis Turbuhaler*. A new generation of the *Turbuhaler* device is also in development.

Pulmicort is a corticosteroid anti-inflammatory inhalation drug used for the treatment of persistent asthma. *Pulmicort* is available in several forms. It is most frequently administered via the *Turbuhaler* device, but it is also marketed in pressurised metered dose inhalers (pMDIs) and as *Respules* which are single doses of a suspension for nebulisation.

In the US, *Pulmicort Turbuhaler* has been marketed since 1998 and was the first inhaled corticosteroid to receive approval as a once-a-day asthma treatment for adults and children from the age of six with mild to moderate asthma. Despite limited supply of inhaler devices due to manufacturing difficulties, sales in the US increased by 94%. In November 1999, AstraZeneca received an 'Approvable' letter from the FDA for *Pulmicort Respules*.

In Japan, AstraZeneca has gained approval for *Pulmicort Turbuhaler*.

AstraZeneca's patents covering budesonide, the active substance in *Pulmicort*, have expired but *Pulmicort Turbuhaler* is covered by *Turbuhaler* device patents. Further development of *Pulmicort Turbuhaler* is ongoing.

Oxis Turbuhaler is a new, long-acting Beta₂ agonist provided in the *Turbuhaler* device for the relief of broncho-obstructive symptoms in asthma patients when corticosteroid treatments are not adequate. Achieving sales of \$87 million in 1999, *Oxis Turbuhaler* has been well received by patients. In addition, a unique claim for *Oxis* use 'as needed', for rescue medication and maintenance allowing patients to use only one inhaler, was approved in the EU in January 2000.

In most countries there is no patent for the active substance formoterol. The main protection for *Oxis Turbuhaler* is through the *Turbuhaler* patent portfolio.

Accolate is an orally active leukotriene receptor antagonist (LTRA) used in the prevention and control of asthma. Leukotrienes are natural substances that cause bronchoconstriction typical of an asthmatic attack and help to trigger inflammation and mucus secretion in the lungs. *Accolate* was the first LTRA to be marketed in the US and is now approved in 65 countries. Approval was granted for paediatric use of *Accolate* in the US in 1999.

Rhinocort is a corticosteroid administered by aqueous solution (*Aqua*), pMDI and the *Turbuhaler* device for the treatment of diseases of the upper respiratory tract such as allergic and non-allergic rhinitis and recurrent polyp formation. Approval for *Rhinocort Aqua* was granted in the US in 1999.

Respiratory R&D Portfolio

Symbicort is a combination of budesonide (inhaled steroid) and formoterol (Beta₂ agonist) in the *Turbuhaler* device, which is in development for asthma and COPD. A submission to the authorities in Sweden for marketing approval for maintenance therapy in asthma was made in December 1999, which is the first step in the EU's mutual recognition procedure. Based on data from the FACET study, *Symbicort* is more effective than budesonide alone and will provide patients with rapid relief and long-term control of asthma.

Viozan is a novel dual D₂ dopamine receptor/Beta₂ agonist in Phase III development for the treatment of COPD.

The development programmes for rofleponide in asthma and seratrodast in COPD were halted at the end of 1999 for failure to meet target criteria.

For further details of the AstraZeneca respiratory pipeline, see page 20.



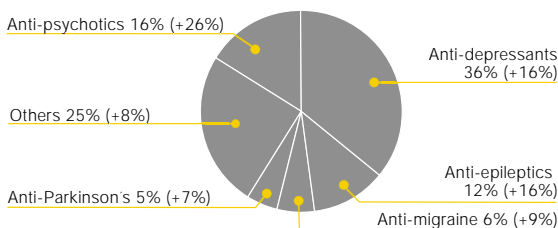
Central Nervous System (CNS)

Therapies for CNS diseases have shown the greatest rate of increase of all therapeutic categories over the last five years, due mainly to the introduction of innovative products to treat depression and schizophrenia. CNS diseases are classified into two types: neurological, which includes acute stroke, dementia, multiple sclerosis and migraine; and psychiatric, including depression, anxiety disorders, schizophrenia, bipolar disorders, sleep disorders, addiction and eating disorders.

CNS diseases not only affect the sufferers: they pose an immense financial and emotional burden to society in general and to healthcare systems specifically. It is an area of significant need for innovative therapies. AstraZeneca markets products for schizophrenia and migraine and has R&D programmes covering most major CNS disorders.

WORLD MARKET 1999: CNS THERAPIES

Value: \$29 billion (+15%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key CNS Products

Zomig, a novel antimigraine compound (triptan), is a selective serotonin receptor agonist. First launched in 1997, it is now available in over 50 countries for the treatment of acute migraine with or without aura. Sales in 1999 were \$189 million, an increase of 88% over 1998, showing good growth in this competitive market. *Zomig* reinforced brand leader status over second generation triptans in 1999 by capturing 25% triptan market share. Regulatory filing for *Zomig* in Japan is planned for 2000.

AstraZeneca gained approval for its *Zomig rapimelt* fast-melt tablet in 11 European countries in 1999. The product was launched in Sweden in September 1999 and launch in the US is expected in 2000. In addition, the *Zomig* nasal spray formulation development programme is on track and filing is expected in 2000. Other key migraine treatment areas for *Zomig* under investigation include menstrual migraine and adolescent migraine.

Seroquel is an atypical anti-psychotic (5-HT₂/D₂) effective in treating both the positive and negative symptoms of schizophrenia, with comparable efficacy to competitor drugs and a unique low side-effect profile. Launched in 1997 in the UK and US, it is in the process of gaining further approvals worldwide including successful mutual approval in the EU. In Japan, where exclusive marketing rights for *Seroquel* have been licensed to Fujisawa Pharmaceutical Co. Ltd., a New Drug Application was submitted in December 1998.

Seroquel achieved sales of \$232 million in 1999, in its second full year after launch, demonstrating tremendous growth of 254% over 1998. Growth was mainly driven by an outstanding sales performance in the US exceeding \$200 million. *Seroquel* is also in further development for the treatment of psychoses in Alzheimer's Disease and mania.

CNS R&D Portfolio

AstraZeneca's CNS R&D covers a wide range of neurological and psychiatric diseases including several novel approaches to the treatment of depression and anxiety, some of which are listed below.

Zendra is a GABA_A-enhancer in late Phase III development for the treatment of acute ischaemic stroke. Filing for FDA marketing approval is expected in 2001.

NXY-059 is a free radical trapping agent licensed from Centaur Pharmaceuticals Inc. in Phase II development for the treatment of acute ischaemic stroke.

NAD-299 is a serotonin receptor antagonist (5-HT_{1A} pre-synaptic) with a novel mode of action in Phase II development for the treatment of depression and anxiety.

Remacemide, a low affinity NMDA channel blocker, is in Phase II development for the treatment of Parkinson's and Huntington's Diseases.

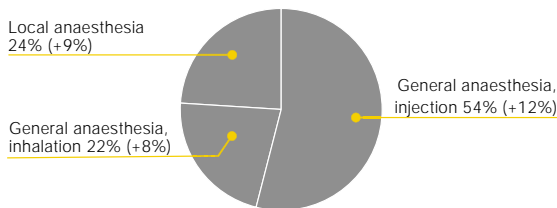
The ATM027 development programme was halted at the end of 1999 for failure to meet target criteria.

Operational Review

Pain Control and Anaesthesia

Anaesthetics are necessary for many procedures carried out in hospitals, clinics and, increasingly, in day-care surgeries which help to reduce healthcare costs and shorten waiting lists for surgery. They are also used in intensive care sedation. Local anaesthetics provide pain relief in various surgical procedures as well as for post-operative pain management and their use is growing steadily. AstraZeneca is committed to maintaining its leading position in anaesthesia, as well as developing new treatments for chronic pain.

WORLD MARKET 1999: ANAESTHETICS Value: \$2 billion (+10%)



Figures in brackets show market growth at constant exchange rates.
Source: IMS Health, MAT Q3 1999.

Key Pain Control and Anaesthesia Products

Diprivan, the world's leading general anaesthetic, is an intravenous sedative hypnotic agent for use in the induction and maintenance of anaesthesia and for intensive care sedation. Launched in 1986, it is particularly suited to meeting the increasing demand for out-patient surgery as well as early transfer from the recovery room to the ward. AstraZeneca's **Diprifusor**, a micro-processor which, when incorporated into infusion pumps, facilitates the administration of **Diprivan** for the maintenance of general anaesthesia, is now widely available.

Sales of **Diprivan** were \$608 million for 1999, a decrease of 6% over 1998. There is generic competition in several countries where patents have expired on its active substance, propofol. Patent protection for the original **Diprivan** formulation still remains in a number of major markets but has expired in the US and will expire in the UK in March 2000. However, patent protection has been sought in most major markets for an improved formulation of **Diprivan** containing the preservative sodium edetate. The US patent was granted in 1998 with an expiry date in 2015. Competition in the US market for this improved formulation of **Diprivan** has intensified with the FDA's approval of a similar anaesthetic with a different preservative. AstraZeneca is challenging this approval. (For further details on the **Diprivan** regulatory position, see page 109.) Sales in Japan grew by 75%, benefiting from the launch in intensive care sedation and the ongoing expansion and acceptance of intravenous anaesthesia.

Naropin. Launched in 1995, **Naropin**, a local anaesthetic and analgesic, is now available in 38 countries worldwide. It is well tolerated by patients and used in major surgery, post-operative pain management and obstetrics. In lower doses, it provides highly effective post-operative pain relief without affecting the patient's ability to move. AstraZeneca markets **Naropin** in ready-to-use **Polyamp** and **Polybag** patented systems of plastic vials which reduce the risk of needle stick injury and are more convenient for hospital staff to use.

In 1999, **Naropin** gained two further EU approvals: one that expands its post-operative pain management usage to 72 hours from 24 hours and a second, which allows its use for peripheral nerve blocks. The substance patents for ropivacaine, the active ingredient in **Naropin**, are expected to expire in major markets in 2010 – 2011. Further patent protection for **Naropin** directed to uses, formulations and processes, will expire between 2009 and 2016.

Xylocaine. After more than 50 years on the market, **Xylocaine** remains the most widely used local anaesthetic in the world, and still continues to grow, achieving 2% increase in sales in 1999 over 1998.

In March 1999, rights to the local anaesthetic, levobupivacaine, were returned to Chiroscience Group plc as a condition of the approval of the merger by the Commission of the European Union and the US Federal Trade Commission.

Pain Control and Anaesthesia R&D Portfolio

LEF is a strong peripheral μ -opioid analgesic without opioid side effects such as respiratory depression, dependence, nausea and vomiting. LEF is being developed in collaboration with Biochem Pharma in a parenteral formulation for treatment of chronic and acute pain. Global filing for marketing approval is expected to start in 2002.

ZD6416 is a targeted treatment for neuropathic pain (pain caused by nerve tissue damage). It is an EP1 antagonist which acts by blocking central prostaglandin E1 receptors. Global filing for marketing approval is expected to start in 2003.

NO-NSAID (Nitric oxide non-steroidal anti-inflammatory). AstraZeneca, in collaboration with NicOx SA, is investigating a novel approach to nociceptive pain (pain caused by injury or disease outside the nervous system) with NO-NSAID compounds.

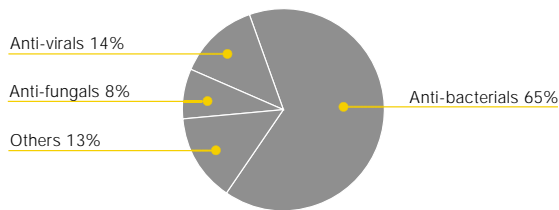
The ACTID cell therapy development programme was halted at the end of 1999 for failure to meet target criteria.



Infection

The global infection market, including anti-bacterial, anti-viral and anti-fungal products, accounts for some 14% of total pharmaceutical sales. AstraZeneca is committed to the discovery, development and marketing of novel agents with new mechanisms of action which address the growing area of unmet clinical need in infection resulting from drug resistance and inadequate therapies.

WORLD MARKET 1999: ANTI-INFECTIVES Value: \$37 billion



Source: Datamonitor.

Key Infection Products

Merrem/Meronem is a broad-spectrum carbapenem antibiotic, licensed from Sumitomo Pharmaceuticals Co. Limited, and is sold by AstraZeneca in all major markets except Japan. *Merrem* sales in 1999 were \$153 million, an increase of 29% over 1998, which indicates the strong demand in hospitals for potent antibiotics to treat serious infections.

Merrem is being further developed in the US for additional indications in hospital and community acquired pneumonia, neutropenics and cystic fibrosis.

AstraZeneca also sponsors an international microbiology study (MYSTIC), which is producing data to show *Merrem* has a low resistance potential compared to other hospital intravenous antibiotics.

Merrem is an important antibiotic in the clinician's armamentarium to treat serious infections in hospital.

Infection R&D Portfolio

AZD2563 is a novel oxazolidinone anti-infective, currently in the investigational new drug development stage. Studies to date indicate that AZD2563 will be in a new class of antibiotics, with a new mechanism of action and activity against some of the most problematic Gram positive resistant pathogens. As an IV and oral agent, patients may be treated in the ICU and on discharge into the community.

In addition, AstraZeneca has invested in microbial genomic research and currently has 10 targets in screening. The company believes that this technology platform will provide the next generation of compounds.

Pharmaceuticals' R&D Pipeline

COMPOUND	MECHANISM	INDICATION	PHASE	ESTIMATED FILING DATE	
				MAA	NDA
Gastrointestinal					
<i>Nexium</i>	Proton pump inhibitor	Acid related GI disease		Filed	Filed
AR-H047108	Reversible acid pump inhibitor	Acid related GI disease	I	2004	2004
Rofleponide	Topical steroid	Inflammatory bowel disease	Pre-clinical		
Helicobacter vaccine	Vaccine	Helicobacter eradication	Pre-clinical		
Helicobacter project	Oral treatment	Helicobacter eradication	Pre-clinical		
+ Ongoing development of <i>Losec</i> and <i>Entocort</i>					
Cardiovascular					
ZD4522	Statin	Hyperlipidemia	III	2001	2001
Melagatran	Thrombin inhibitor (sc)	Thrombosis	III	2001	2001
H376/95	Thrombin inhibitor (oral)	Thrombosis	III	2001	2001
AR-C69931	P ₂ T antagonist (IV)	TBD	II	>2002	>2002
AR-C126532	P ₂ T antagonist (oral)	Arterial thrombosis	I	2005	2005
H-327/86	Immunomodulator	TBD	II	>2002	>2002
AR-H039242	PPAR agonist	Insulin resistance	II	2003	2003
ZD4927	Factor Xa inhibitor	Thrombosis	I	>2002	>2002
H409/22	NPY antagonist	TBD	II	>2002	>2002
H345/52	Class III anti-arrhythmic (IV)	TBD	II	>2002	>2002
AR-H050642	Class III anti-arrhythmic (oral)	Atrial fibrillation	Pre-clinical		
ZD0947	K ⁺ channel opener	Urinary incontinence	I	>2002	>2002
+ Ongoing development of <i>Seloken ZOK</i> , <i>Atacand</i> , <i>Atacand/HCT</i> and <i>Zestril</i>					
Oncology					
<i>Faslodex</i>	Anti-oestrogen	Breast cancer	III	2000	2000
<i>Iressa</i>	Signal transduction inhibitor	Solid tumours	II	2001	2001
ZD0473	3rd generation platin (IV/oral)	Solid tumours	II/Pre-clinical	2002/-	2002/-
ZD9331	Thymidilate synthase inhibitor (IV/oral)	Solid tumours	II	2001/>2	2001/>2
ZD6126	Vascular targeting agent	Solid tumours	Pre-clinical		
AZD6474	Anti-angiogenic	Solid tumours	Pre-clinical		
+ Ongoing development of <i>Arimidex</i> , <i>Casodex</i> , <i>Tomudex</i> and <i>Zoladex</i>					
Respiratory					
<i>Symbicort Turbuhaler</i>	Inhaled steroid/Beta ₂ agonist	Asthma/COPD	Filed/III	1999/01	TBD
<i>Viozan</i>	Dual dopamine/Beta ₂ agonist (pMDI)/TBH	COPD	III	2001	2001/03
AR-C89855	Dual dopamine Beta ₂ agonist	COPD	Pre-clinical		
RPNS (rofleponide)	Intranasal steroid	Rhinitis	II	2004	2004
ZD8321	Human neutrophil elastase inhibitor	ARDS	II	TBD	TBD
ZD0892	Human neutrophil elastase inhibitor	COPD	I	2004	2004
AR-D111421	VIP agonist	Asthma	II		
ZD4407	5-lipoxygenase inhibitor	COPD	Pre-clinical		
NK1/NK2	Dual neurokinase antagonist	Asthma	Pre-clinical		
T3	Dry powder inhaler, non-reservoir	Asthma	I	TBD	TBD
+ Ongoing development of <i>Accolate</i> , <i>Pulmicort</i> , <i>Rhinocort</i> , <i>Oxis</i> and all inhaled products in HFA (non CFC) metered inhalers					
CNS					
<i>Zendra</i>	GABA _A -enhancer	Stroke	III	2001	2001
AR-R15896	NMDA antagonist	Stroke	II	2002	2002
NXY-059	Radical scavenger	Stroke	II	2002	2002
NAD299	5-HT _{1A} antagonist	Anxiety/depression	II	>2002	>2002
AR-A2	5-HT _{1B} antagonist	Anxiety/depression	Pre-clinical		
Remacemide	NMDA antagonist	Huntington's/Parkinson's	III/II	2001/-	2001/-
+ Ongoing development of <i>Seroquel</i> and <i>Zomig</i>					
Pain Control and Anaesthesia					
LEF	Peripheral μ-agonist	Acute and chronic pain	II	2002	2002
LTA	Na channel blocker	Analgesia	II	>2002	>2002
ZD6416	EP1 antagonist	Chronic pain	II	>2002	>2002
NO-NSAID	Nitric oxide NSAID derivative	Acute and chronic pain	Pre-clinical		
Dental Gel	Topical anaesthesia	Dental anaesthesia	III	2001	2001
Delta agonist	Delta opioid	Acute and chronic pain	Pre-clinical		
Oral glycine	NMDA antagonist	Neuropathic pain	Pre-clinical		
+ Ongoing development of <i>Naropin</i>					
Infection					
AZD2563	Oxazolidinone antibiotic	Gram positive infections	Pre-clinical		
ME609 (Medivir joint development)	Anti-viral	Topical herpes	II	2001	2001
+ Ongoing development of <i>Merrem</i> and <i>Foscavir</i>					



Pharmaceuticals' Research & Development

AstraZeneca has a world-class record of successful R&D aimed at generating a flow of new prescription medicines and preserving or enhancing the competitive advantages and market position of existing products. R&D is strategically prioritised and focused on target markets which are judged to have substantial profit potential.

Following the merger, AstraZeneca re-organised its R&D and prioritised its development portfolio in line with this strategy, creating an integrated, globally managed R&D organisation which is therapy area led and project driven.

Research is focused on important commercial targets and on real medical needs within several therapy areas including: gastrointestinal, oncology, cardiovascular, respiratory, central nervous system, infection, pain and inflammation. The portfolio of product line extensions and development drug candidates are presented earlier in this Operational Review, under the relevant therapy areas.

The strategic review of R&D in 1999 also led to the realignment of resources in specific centres in the UK and Sweden (where AstraZeneca's R&D is headquartered) and an expansion of its new research facilities in the US.

R&D in the pharmaceutical industry entails considerable uncertainty and is generally characterised by long candidate discovery and development periods, and high development costs. A key objective of AstraZeneca's new R&D organisation and strategy is to reduce all of these factors by enhancing output and performance, whilst maintaining the fundamental imperatives of product efficacy, patient safety and an ethical approach. As part of this objective, AstraZeneca aims to build a world leading drug discovery force.

The Discovery Process

In recent years, scientific and technological advances have improved the process of rational drug design and AstraZeneca has incorporated the techniques listed in the table below into its discovery chain activities. The company believes that these investments are crucial to its commitment to build a leading force in drug candidate discovery and thereby generate new and innovative therapies.

AstraZeneca's new Discovery organisation will consist of approximately 3,500 people worldwide, working in a number of different research areas. Improving discovery output and quality will be achieved through a combination of increased medical input early in target identification, increased use of enabling science and technology to speed lead identification and lead optimisation, and earlier use of safety assessment and drug disposition technologies to eliminate less promising projects. By these methods, AstraZeneca aims to increase its candidate drug (CD) output and have more CDs proceed through development to launch. In order to reach these goals, the company has initiated a number of changes in the Discovery organisation including increased incorporation of informatics and genetics into the discovery process as these will be major levers for successful CD discovery in the years to come.

AstraZeneca supplements its in-house capabilities through external collaborations with academic institutions and other companies from which it seeks to obtain appropriate rights whenever possible to any resulting patents and technology. These collaborations broaden the range of exploratory research and allow access to a wider base of scientists and technologies. For example, during 1999, a major collaboration was signed with Incyte Pharmaceuticals Inc.

DISCOVERY TECHNIQUES IN ASTRAZENECA'S GLOBAL TECHNOLOGY PLATFORM

Biology	Chemistry	Informatics
n comparative genomics	n structural chemistry	n bioinformatics
n pharmacogenomics	n compound management	n cheminformatics
n toxicogenomics	n compound collection growth	n advanced statistical science
n gene expression tools	n targeted chemical libraries	n complex systems analysis – modelling
n human genetics	n high throughput screening	n intranet delivery of discovery information
	n combinatorial chemistry	

Operational Review

The Development Process

The process of developing a pharmaceutical product, from the start of development to the submission of an application for registration, typically takes between five and seven years, but this period varies considerably from case to case and country to country. In Phase I, a compound is tested in a small group of healthy volunteers for safety, side-effects and pharmacological profile. In Phase II, a compound is tested in a limited number of patient volunteers for safety, efficacy and appropriate dosage. In Phase III, a compound is tested in a larger diverse group of patient volunteers to assess safety, efficacy, side-effects and dosage in a statistically significant fashion. The results of these clinical trials are submitted to appropriate regulatory bodies with the objective of obtaining approval to sell the compound. After commercial launch, trials monitor the safety and efficacy of the product in large patient groups. A compound may fail at any stage during this process. AstraZeneca's new Development organisation will consist of more than 4,000 people, mainly located on the six major R&D sites based in the US, UK and Sweden. The organisation will be globally managed to leverage industry best practice processes across the whole organisation, and to improve the speed of development, within an overall strategic portfolio management framework.

Clinical and regulatory development groups will work closely with their counterparts in AstraZeneca's marketing companies worldwide, and regular bench-marking will be employed to allow re-engineering for increased efficiency. Increased investment in informatics and automation aims to make the Development organisation increasingly competitive.

R&D Performance Targets

Industry statistics indicate that only a small proportion of compounds entering development succeed in reaching the market, and there can be no guarantee that the compounds in development will survive the development process and obtain necessary approvals for sale.

Nevertheless, AstraZeneca has set clear targets for its R&D:

- n Deliver three or more medically important, commercially successful new products each year
- n Increase candidate drug output to more than 15 per year by 2003
- n Double the project success rate to 20% by 2005
- n Reduce the time from candidate drug to launch to less than six years
- n Register in all major markets in a time window of 12 months

Strategic Product Portfolio Management

AstraZeneca recognises the value of its portfolio and the need to manage it strongly and actively. An international marketing and licensing organisation, Product Strategy & Licensing (PS&L) has been put in place by the new company, charged with the responsibility for the optimisation of the global product portfolio. PS&L works closely with R&D and the sales and marketing network to agree the priorities for the development resources needed to deliver both new molecules to the market and lifecycle support to the selling organisations for those already commercialised. Working with cross-functional teams within therapeutic areas and across geographic boundaries, PS&L works to make certain that individual products meet the target product profiles for successful commercialisation and that the portfolio meets overall business needs. Licensing plays an important part in all major pharmaceutical company portfolios. In-licensing of development candidates and marketed products is led by PS&L and integrated into a single global product portfolio prioritisation process alongside medicines from AstraZeneca's own laboratories.

Pharmaceuticals' Sales and Marketing

The formation of AstraZeneca created an extensive worldwide sales and marketing network. A priority during the merger process was to ensure the rapid integration of sales forces and associated resources, with minimal disruption in service to the customer and to the business. The new sales and marketing force has been designed to better anticipate and respond to customer needs, and a robust structure has been defined in line with AstraZeneca's strong presence in the US, Western Europe, Japan and with its operations in all other important pharmaceutical markets.

AstraZeneca's products are marketed primarily to physicians (both general and specialist). However, marketing efforts are also directed towards explaining products' economic and therapeutic benefits to healthcare buying groups such as Managed Care Organisations in the US, trust hospitals and budget-holding medical groups in the UK, and insurance groups in Germany.

The company employs a range of sales and marketing tools, as appropriate for its individual markets. These include the Internet which AstraZeneca uses as a communications medium to inform customers about its products, and to share corporate information with the public.



North America

AstraZeneca's strong business performance in North America (21% growth over 1998) and in the major US market (23% growth over 1998) reflected a rapid and effective post-merger integration programme throughout which the priority was continued customer focus. Canada, where AstraZeneca is now the number one pharmaceutical company, was the first country to have all integration programmes finalised.

Particularly successful was the restructuring of the US sales force (now over 4,000 people and one of the three largest in the US), without compromising business targets. During 1999, the business extended the market leadership of *Prilosec*, with over \$3.8 billion in sales. Sales of *Seroquel* exceeded \$200 million in its second full year on the market and sales growth for *Pulmicort Turbuhaler* was doubled.

In the coming year, AstraZeneca aims to make a considerable investment in the capabilities of its sales force by leveraging state-of-the-art information technology to ensure the highest level of service to healthcare providers. For example, sales representatives will be further equipped to meet customer needs with the launch of the Compass and Northstar technology system, which includes a custom-built, hand-held 'personal digital assistant', exclusively designed for AstraZeneca.

Direct-To-Consumer (DTC) advertising has become a significant force in physician communication and patient education. AstraZeneca was one of the first pharmaceutical companies to advertise branded prescription medicines in the US and in 1999 launched the first ever DTC campaign for a cancer product – *Nolvadex*, the world's most prescribed treatment for breast cancer and the only product approved to reduce the risk of developing breast cancer in women at high risk. The 'Myths' campaign was aimed at encouraging women to learn more about breast cancer prevention and to date, more than 700,000 requests for further information have been received. During the year, the company also extended existing DTC programmes for *Accolate*, *Zomig* and *Prilosec*.

In addition to television commercials, print advertisements and direct mail, AstraZeneca in the US uses the Internet to provide high quality information for physicians and patients about disease as well as the company's products. The website for *Prilosec*, for example, features a comprehensive search engine that facilitates easy access to the site for information on gastrointestinal disorders.

AstraZeneca's understanding of the US market, together with its products, people skills and commitment to the customer, leave the company well-placed to further increase sales growth in this, the world's largest pharmaceuticals market.

Europe

In 1999, AstraZeneca maintained its number two company position in Europe with sales growth of 15%. The integration and reorganisation of the sales forces, which is largely complete, was carried out effectively and rapidly on a detailed country-by-country basis. Work is also underway to find improved ways to reach the customers and in particular the development and integration of a range of external and internal technologies and business practices including the Internet, 'expert' call centres and Electronic Territory Management Systems.

Of the major markets, France showed the greatest growth (27%), predominantly due to continuing growth in *Losec*. Germany, despite the patent expiry of *Losec* in the first half of 1999 still managed to record growth of 2% with newer products *Atacand* and *Oxis* helping to offset the *Losec* decline. In Italy, the underlying sales growth has been complicated by changing patterns of parallel exports and by the buy-back of *Losec* rights from Schering-Plough. Excluding these, domestic sales grew by some 20%. In Sweden, where AstraZeneca is the largest company by market share (21%), sales growth of 8% was achieved, partly due to the launch of *Losec MUPS*. In the UK, AstraZeneca became the number one pharmaceuticals company with sales volume growth of 6%.

Japan

During 1999, AstraZeneca moved very quickly in the context of Japan to merge most of its operations by the year end. The sales forces, which are already engaging in joint promotions, should fully merge their activities in the near future. Sales volumes grew by 9% during 1999, exceeding the market growth rate, aided by strong growth in *Zestril* and *Zoladex*, together with very successful launches of *Diprivan* for use in ICU and *Casodex* 80mg.

Rest of World

Similar success has been achieved in merging AstraZeneca's marketing operations in other regions of the world and sales growth performance has generally been strong. In Asia, overall growth was 18%, with all AstraZeneca companies increasing their market share and AstraZeneca has become the leading multi-national pharmaceutical company in Taiwan. In Latin America, sales growth at 17% was ahead of the overall market growth and it has recently been announced that AstraZeneca is terminating its agreement with Grupo Farma concerning distribution rights to the former Astra products in Venezuela, Colombia, Central America and the Dominican Republic. Distribution arrangements in many other countries have been rationalised and the possibility of establishing more AstraZeneca operations in distributor markets is being considered.

Operational Review

Pharmaceuticals' Manufacturing

In order to serve its international business, AstraZeneca has 36 manufacturing facilities in 20 countries and employs 12,500 people in its manufacturing activities. Active bulk pharmaceuticals are produced on eight sites with formulated product production and packing for worldwide or local markets carried out on 33 sites. Since the merger, production units have been rationalised in Australia and Brazil with manufacturing consolidated into one facility in each country. Further consolidation of manufacturing facilities will take place as the integration plans are delivered.

AstraZeneca has continued to develop its manufacturing capability and in 1999 over \$700 million was invested globally to meet the growth of current products and to prepare for the introduction of new products. Further major investments have been approved for manufacturing facilities in Sweden, UK, Germany, France and Puerto Rico.

Manufacturing has concentrated on maintaining customer service and securing product supply throughout the merger whilst building a responsive organisation that can meet the changing demands of its markets and customers worldwide.

The manufacturing focus is to build on these achievements and deliver a capability that offers competitive advantage for the international business. Plans are in place to secure the identified synergies from manufacturing operations and drive performance through effective supply chain processes and skills development.

Competition

AstraZeneca is a powerful global competitor in the highly competitive and highly regulated ethical pharmaceuticals market. AstraZeneca's products compete not only against other branded, patent protected, prescription products from international and regional research-based pharmaceutical companies and research-based biotechnology companies, but also against generic products from companies which typically do not incur significant R&D costs. In recent years, the pharmaceuticals market has grown increasingly competitive under the influence of new technologies both in the biomedical and information fields and the impact of industry consolidation.

AstraZeneca is committed to maintaining and enhancing its competitive position in its therapy areas. The ability to achieve this depends mainly on its development of new, innovative, cost-effective products from its own R&D and in-licensing activities, its manufacturing of products to high quality standards and its effective marketing of products to its customer groups.

DIAGNOSTICS

Diagnostics provides specialised human genetic testing services through the Cellmark Diagnostic business and sells diagnostic products and reagents for DNA analysis of human gene variants.

ASTRA TECH

Astra Tech is engaged in the research, development, manufacture and marketing of advanced medical devices and implants for use in healthcare, primarily in the area of urology but also in surgery, diagnostic radiology and odontology. Astra Tech has a leading market position in the Nordic countries and is expanding its operations in European and other key markets. Sales are conducted through Astra Tech's own subsidiaries in most Western European countries and the US and with local distributors in other countries. Sales in 1999 totalled \$111 million, an increase of 15% on 1998.

All product lines showed a good sales growth and in particular, sales of *LoFric* hydrophilic urinary catheter continued to increase in both established and new markets. The Dental Implant System has now been successfully introduced in most key markets, and is rapidly gaining acceptance among dentists and implantologists.

Comprehensive R&D and clinical research programmes will further strengthen the product portfolio.

SALICK HEALTH CARE

Salick Health Care, Inc. (SHC) is a leader in the provision and management of care for patients with cancer in the US. Ownership of SHC enables AstraZeneca to provide a broad range of services to health insurers, oncologists, other specialists and their patients, and provides AstraZeneca with access to the direct medical care cancer market in addition to that accounted for by pharmaceuticals.

SHC operates full-service out-patient comprehensive cancer centres in affiliation with major university, teaching and community hospitals principally in California and New York. The SHC-affiliated facilities provide substantially all of the out-patient services necessary to diagnose and treat patients with cancer. In 1999, the dialysis business unit was sold to Gambro to allow for greater focus on oncology.

AstraZeneca will continue to review options with potential growth opportunities across the range of its interests in cancer.



ZENECA AGROCHEMICALS

Zeneca Agrochemicals is one of the world's leading suppliers of crop protection chemicals, with sales in 1999 of \$2.7 billion. Its broad range of products, designed to improve crop yields and food quality, controls major weeds, diseases and pests in all principal crops. Leading products include the herbicides *Gramoxone*, *Touchdown*, *Reglone*, *Surpass*, *Fusilade*, *Flex*, and *Achieve*; the insecticides *Karate* and *Force* and the fungicides *Amistar* and *Bravo*. The international scale and breadth of Agrochemicals' operations enable it to develop products cost-effectively and quickly bring them to the market.

The business environment was unfavourable in 1999. With prices of the major crop commodities at their lowest level for many years, farmers' expenditure was reduced in most major markets. Competition has been intense and overall, the agrochemicals market declined by an estimated 5%.

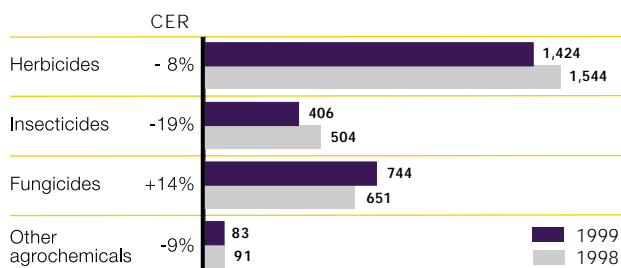
Against this difficult background, Zeneca Agrochemicals delivered a solid sales performance, down 5%, due mainly to a sharp market downturn in the Americas. The business increased sales in Europe against a market contraction and in Asia, where a steady recovery is underway.

During 1999 the business undertook a number of restructuring projects designed to improve profitability; these measures resulted in some 600 job reductions.

Highlights of the year for Zeneca Agrochemicals included:

- n December announcement of agreement with Novartis to spin off and merge Zeneca Agrochemicals with Novartis' agribusiness to create the world's first global, dedicated agribusiness company, Syngenta AG
- n The establishment of *Amistar* as the world's leading proprietary fungicide, with a sales increase of over 40%
- n Significant progress in the development of two new products scheduled for launch in 2002/3
- n Two significant new biotechnology collaborations with Japan Tobacco and Maxygen

ZENECA AGROCHEMICALS SALES BY PRODUCT TYPE \$m



Industry background

The nine largest agrochemicals companies account for more than 75% of total worldwide sales. The main manufacturers of agrochemicals are units of larger pharmaceutical or chemical companies based in Western Europe and North America. The basis of competition includes innovation, product development and differentiation, geographical coverage, price and customer service.

Registration and re-registration procedures apply in all major markets and Zeneca Agrochemicals believes that these procedures, in addition to complex manufacturing processes, tend to mitigate the effects of patent expiry on a product's market position and price.

Although the world agrochemicals market declined in 1999, Zeneca Agrochemicals believes that increasing food consumption, driven by population and economic growth, will sustain an underlying growth in the demand for crop protection. The future agrochemicals market will also be influenced by environmental considerations and developments in biotechnology.

Herbicides

A fall in herbicide sales in 1999 was caused by the impact of market conditions on the selective herbicide range, particularly in soya and wheat. Sales of non-selective herbicides were sustained, a notable achievement in a difficult market environment.

Non-selective Herbicides

Gramoxone is Zeneca Agrochemicals' principal brand name for paraquat, a non-selective contact herbicide first introduced in 1962. Paraquat is one of the world's top three herbicides in sales terms and Zeneca Agrochemicals' second largest selling product. It has been a leading product in the development of minimum tillage cropping systems, the adoption of which continues to increase because of the resultant benefits such as the reduction of soil erosion. *Gramoxone* is registered in over 120 countries around the world.

A new \$65 million manufacturing plant in Nantong, China is planned to start production in 2000 to support future growth both locally and in other Asian markets.

Operational Review

Touchdown, a non-selective herbicide with systemic activity, is a premium product in the market for glyphosate products which represents the fastest growing herbicide product sector in the industry. Differentiated by its speed of action and rain-fastness, **Touchdown** is now registered in over 90 countries for use on a wide spectrum of crops including herbicide tolerant soya in the US. Sales grew significantly in 1999.

Reglone, a non-selective contact herbicide, is used as a crop desiccant to allow easier harvesting and reduce drying costs.

Selective Herbicides

Whilst under pressure from the introduction of herbicide tolerant crops, selective herbicides account for the major portion of the herbicide market. Soybean, canola and cotton are the crops where herbicide tolerance has had the greatest impact. Because of their exposure to these crops, **Fusilade** and **Flex** have been amongst the most affected of Zeneca Agrochemicals' selective herbicides.

Fusilade, a selective herbicide, is the market leader for post-emergence control of grass weeds. It is registered for use in over 60 broad-leaf crops, with major outlets in cotton and soya in the US and sugar beet and oilseed rape in Europe. The selective action of **Fusilade** allows farmers to delay application until grass weeds appear, allowing economical weed control.

Flex is a post-emergence selective herbicide for control of broad-leaved weeds in soya, complementary to **Fusilade**.

Surpass is a major grass herbicide for use in corn with a principal market in the US. Various formulations and mixtures of the product have been developed to suit a wide range of agronomic practices and give growers maximum flexibility in use.

The corn herbicide range is completed by **Milagro** and **Mikado**, both of which perform well in Europe. The business increased sales of its corn herbicides in 1999, although the market was badly hit by low crop prices and a reduced crop area. The planned introduction of the new corn herbicide, mesotrione, in 2002/3 will give the business a strong position in all segments of the corn herbicide market.

Achieve is a post-emergence herbicide which controls grass weeds in wheat and barley.

Ordram, **Boxer**, **Racer**. Agrochemicals has a range of other herbicides, including **Ordram** for use in rice, **Boxer** for wheat, and **Racer** for sunflowers.

Insecticides

In 1999, Zeneca Agrochemicals' insecticide sales declined in a market which contracted.

Karate, the world's leading agricultural pyrethroid brand, is Zeneca Agrochemicals' largest selling insecticide with an increasing presence in the public health market under the brand **Icon**. Sales in the agricultural markets were affected in 1999 by the depressed farming economy in North and Latin America and low insect pressure in many key insecticide markets throughout the world. Registration approvals in some of the major markets for the novel micro-encapsulated product **Karate** with **Zeon** technology, were recently gained in anticipation of further launches.

Force is the market leader in the corn soil insecticide sector. It offers growers both highly effective control of a wide range of pests and an alternative to the older products previously available.

Ambush, **Cymbush**, **Pirimor** and **Nemathorin**. **Ambush** and **Cymbush** insecticides are used particularly in horticulture and non-crop outlets. **Pirimor** is a specific aphicide used on a wide range of cereal, vegetable and tree crops. The nematocide, **Nemathorin**, was successfully test-marketed in the UK in 1999.

Fungicides

Through the successful introduction of **Amistar** and the acquisition of **Bravo**, Agrochemicals has established a strong position in fungal control and is now one of the market leaders.

Amistar (sold as **Abound**, **Quadris** and **Heritage** in the US). Agrochemicals has successfully established **Amistar** as the world's leading proprietary fungicide, consolidating its already strong position in the developed markets of the US and Europe and making further gains in developing markets such as Brazil, Mexico and Korea. **Amistar** is now Zeneca Agrochemicals' largest selling product. To meet the growing demand, a new manufacturing plant was commissioned during the year at Grangemouth, UK.

Bravo acquired in 1998, is also one of the world's leading fungicides. With its multi-site mode of action, it is a good partner for **Amistar** and is being increasingly integrated into disease control programmes which use both products.

Shirlan. Licensed from ISK of Japan, **Shirlan** is a fungicide for control of potato blight and other diseases.

Impact and **Anvil** are fungicides from the triazole area of chemistry. The major outlet for both is wheat, although **Anvil** also has significant usage on fruit and vegetables and growing application in rice.



Agrochemicals' Research and Development

The business has a long and successful track record of inventing and developing novel crop protection chemicals and a strong portfolio of new products. R&D has been directed towards providing innovative and differentiated products which meet the requirement for environmentally benign, safer and more effective crop protection products. Agrochemicals' strategy is to deliver valuable and sustainable products for the agricultural and food industries through both chemistry and biotechnology. The entire process from the identification of a lead compound to registration and launch into the market typically takes between six and eight years. This complex process involves an interaction between scientific expertise and skills in production, marketing and regulatory management. R&D also plays an essential role in the support and enhancement of Zeneca Agrochemicals' broad product range through active product life cycle management.

The business has been investing significantly in enabling technologies to ensure that its innovative capability and capacity remains at the forefront of the industry. It is a leader in combinatorial chemistry and the application of high throughput screening to identify crop protection chemicals.

Genomics represents a further platform technology critical to future research and development success, providing insights to plant and animal biology to enable rational targeting and design of pest control chemicals.

A significant development in Zeneca Agrochemicals' R&D in recent years has been an increase in the level of resources devoted to biotechnology and the formation of key collaborations with other organisations with complementary interests. Agrochemicals expects biotechnology to open up new areas of potential opportunity covering both input and output traits and plans to exploit this to create a large and important new business.

Zeneca Agrochemicals continues to expand its activities in biotechnology through external collaborations and in 1999 formed a series of new partnerships, including a joint venture with Japan Tobacco to develop new enhanced varieties of rice, the world's largest staple crop. The business also initiated a collaboration with Maxygen of the US which provides it with another core enabling technology and complements the investments already made in genomics.

Product Pipeline

In herbicides, Zeneca Agrochemicals' main development compound is mesotrione, a pre- and post-emergence herbicide effective against key broad-leaved weeds in corn. It derives from the novel triketone area of chemistry and will complement the grass weed control of *Surpass*. The product has been granted reduced risk status in the US, reflecting its favourable environmental and toxicological profile. A new \$46 million manufacturing facility has been sanctioned at Cold Creek, Alabama, in the US which is due to open in time for an expected 2002/3 product launch.

In the fungicides area, picoxystrobin, a second generation strobilurin from the same area of chemistry as *Amistar*, is scheduled for launch in 2002/3. Construction of a \$75 million manufacturing plant is now underway at Grangemouth in the UK. The business is also developing anti-fungal proteins and other genetic fungal control mechanisms to complement its strong range of fungicides and offer growers an integrated approach to plant disease management.

Agrochemicals' Sales and Marketing

Zeneca Agrochemicals has marketing organisations in its major markets, with dedicated sales forces which provide customer and technical service, product promotion and market support. Products are sold to the end-user through independent distributors and dealers, most of whom also handle other manufacturers' products. Agrochemicals' marketing network enables it to launch its products quickly and effectively and to exploit its range of existing products.

Agrochemicals' Manufacturing

Zeneca Agrochemicals' five main active ingredient manufacturing facilities are at Grangemouth and Huddersfield in the UK, in the US at Cold Creek, Alabama and at Bayport and Greens Bayou in Texas. The business formulates, packages and labels products at locations around the world, close to the principal markets in which such products are sold.

Operational Review

MARLOW FOODS

Marlow Foods produces and sells the *Quorn* branded range of innovative healthy protein foods. *Quorn* foods are naturally low in fat and calories, and are a good source of protein and fibre. They are available in a wide variety of meal dishes and all products are presented under the *Quorn* brand; some are co-branded with larger retailers and are sold in both chilled and frozen forms. *Quorn* products are developing broad appeal to an increasing proportion of the population who wish to choose foods that can help them manage their lifestyle more healthily without compromising on taste and convenience.

In 1999, the *Quorn* foods range continued to grow. In the UK, which is still currently the largest market for *Quorn* products, sales volume grew by 3% despite difficult trading conditions, and the *Quorn* brand improved its market leadership position. In other European markets, sales turnover increased by 32%, supported by several new product introductions, including a very successful launch in Sweden. *Quorn* products are now rapidly moving towards being recognised as the leading meat alternative brand in Europe, as a consequence of its versatility, taste and health appeal.

Plans are progressing well for entry into the large US market which is a key target for 2000.

The *Quorn* brand now has total sales in excess of 150 million meals per year.

DESCRIPTION OF PROPERTY

AstraZeneca owns and operates production, marketing and research and development facilities worldwide. Earlier sections of the Operational Review give information with regard to the location and general character of principal manufacturing sites and research facilities. Substantially all of AstraZeneca's properties are held freehold, free of material encumbrances and AstraZeneca believes such properties are adequate for their purposes and suitably utilised according to the individual nature and requirements of the relevant properties.

MISCELLANEOUS

AstraZeneca and Imperial Chemical Industries PLC own a joint venture company in the UK, held indirectly as to 51% by AstraZeneca and 49% by ICI which acts as the holding company for a group of companies that historically provided insurance cover to both Zeneca and ICI businesses as well as to third parties. However, no new insurance business has been underwritten in this way since 1 January 1999.

AstraZeneca's ongoing insurance transactions are placed with its subsidiary, AstraZeneca Insurance Company Limited, and the joint venture insurance companies operate only to settle historic liabilities.

INDUSTRY REGULATION

AstraZeneca's products are subject to numerous regulations concerned with their safety and efficacy and, in the case of pharmaceuticals, their pricing. The degree and scope of regulation varies across the different businesses and according to the jurisdiction concerned. Most of the principal markets in which the group operates are tightly regulated and standards are becoming increasingly demanding.

Regulations governing ethical pharmaceuticals and agro-chemicals are stringent and the manufacture and marketing of these products are normally conditional upon regulatory approval. Registration processes are complex and time consuming and involve significant expenditure. Compliance with the stringent standards imposed by the principal regulatory agencies, such as the US Food and Drug Administration, makes it more likely that applications to similar agencies in other markets will succeed. Nevertheless, approval in one market does not necessarily mean that approval will be granted in other markets. Regulation is concerned not only with a product's chemical composition, but also with matters such as manufacturing, handling, packaging, labelling, distribution, promotion and marketing.

Where necessary, each of AstraZeneca's businesses maintains dedicated regulatory staff with substantial expertise and experience in applying for, pursuing and maintaining product registrations in different jurisdictions.

Product Regulation: Pharmaceuticals

General. Pharmaceutical product registration or licensing is principally concerned with the safety, efficacy and quality of new medicines. Before a product is approved for marketing, it must undergo exhaustive and lengthy clinical trials. The process of developing a new pharmaceutical product, from idea to launch in the market, typically takes up to twelve years, but this period varies considerably from case to case and country to country. The submission of an application for registration will include specific details of the plant and procedures involved in production. The time taken from submission of such application to launch of the product is typically one to two years.

After a product has been approved by the regulatory authorities and has been launched, it is a condition of the product licence that all aspects relating to its safety, efficacy and quality must be kept under review. Depending on the jurisdiction, fines and other penalties may be imposed for failure to adhere to the conditions of product licences and, in extreme cases, the product licence can be revoked. During a product's development and following its launch, the product may be the subject of third party studies and reports that evaluate or comment upon its efficacy and relative benefit, alone and in combination with other products. These studies and reports, even if not widely accepted by the scientific community, may influence the acceptance of the product in the market.



During the marketing of a product, strict procedures must be in place to monitor, evaluate and report any potential adverse reactions. Where adverse reactions occur or it is judged that they may occur, changes may be required to prescribing advice and to the product licences. In extreme cases, the product may need to be withdrawn.

Internal monitoring procedures are also maintained in relation to registered products to ensure that quality is assured and that operations are conducted in line with approved processes. During the life of a product, improvements and modifications to manufacturing processes may be made either directly by the manufacturer or, as necessary, with the approval of the relevant regulator. Approval is also required for any changes to product formulation, packaging or labelling. Manufacturing plants and processes are subject to periodic external inspection by the regulators as part of their monitoring procedures to ensure that manufacturers are complying with prescribed standards of operation. Any issues identified as a result of such inspections are then addressed following discussion and agreement with the relevant regulators. In addition, the regulatory agencies, in particular the FDA, seek continuing enhancements to current industry standards of operation and compliance. AstraZeneca believes that its current operating practices and enhancement plans are in line with those of other pharmaceutical companies.

Pricing. Prescription medicines are subject to competitive forces which affect prices and/or are further constrained by government price controls which operate in most countries in which AstraZeneca sells its products. The mechanisms of price control are many and varied and can result in large price differentials between markets, which may be further aggravated by currency fluctuations. The pharmaceuticals industry will continue to be affected by pressures to contain healthcare expenditure as governments and other bodies increasingly seek to control costs. New products with improved efficacy/side-effect profiles may command premium prices as the regulatory authorities and payers recognise the advantages offered to patients.

Europe. Some governments in Europe, notably Italy and Spain, set price controls having regard to the medical, economic and social impact of the product. In other European countries, primarily Germany, the UK, the Netherlands and, more recently, France, governments are exerting a strong downward pressure on prices by incentives and sanctions to encourage doctors to prescribe cost-effectively. Efforts by the EU Commission to harmonise the disparate national systems have met with little immediate success, leaving the industry exposed to ad hoc national cost containment measures on prices and the consequent parallel trading of its products from markets with prices artificially depressed by governments into those where higher prices prevail.

US. Currently there is no direct government control of prices for non-government sales in the US. In 1990, however, federal legislation was enacted which required manufacturers to agree to substantial rebates to obtain a manufacturer's best price for state Medicaid agencies, and an additional rebate if manufacturer price increases after 1990 exceed the increase in inflation, in order for the manufacturer's drugs to be reimbursed by state Medicaid programmes. Since 1990, certain states have taken action to require further manufacturer rebates on Medicaid drug utilisation and for other state pharmaceutical assistance programmes. Congress has also enacted statutes placing a ceiling on prices manufacturers may charge US government agencies and establishing a minimum discount (comparable to the Medicaid rebate) on manufacturers' sales to certain clinics and hospitals that serve the poor and other populations with special needs. These government initiatives, together with competitive market pressures, have contributed to restraints on realised prices.

In addition, realised prices are being depressed by pressure from managed care and institutional purchasers who use cost considerations to restrict the sale of preferred drugs that their physicians may prescribe as well as other competitive activity. Such limited lists or formularies may force manufacturers either to reduce prices or be excluded from the list, thereby losing all the sale revenue from patients covered by that formulary. The use of strict formularies by institutional customers is increasing rapidly in response to the current cost containment environment, resulting in lower margins on such sales.

Japan. There is formal central government control of prices in Japan. New product prices are determined primarily by comparison with existing product classes. All existing products are subject to a price review at least every two years, which has usually led to an overall price reduction of approximately 5% to 10%, although the prices of some products remain unchanged or are increased after the review. The extent of any price reduction is based on the degree to which the product has been discounted relative to the official reimbursement price. The system of setting and reviewing prices is in the process of being changed, but a major revision is not expected before the end of 2000. Proposals to reference prices against those of other major countries (such as the US, Germany, the UK) are still under discussion.

Operational Review

Product Regulation: Astra Tech

Product registration and certified quality management systems form the basis of the regulatory environment relating to medical devices.

In Europe, compliance with regulatory requirements involves the implementation and maintenance of a quality management system and, for certain products, a design dossier review. Medical devices in the US are regulated through a product registration requirement. In addition, the manufacturer of a medical device is required to have implemented a quality management system similar to the European model which is monitored through regular site inspections. In other countries with medical device legislation, regulation generally takes the form of traditional product registration systems and requirements as regards quality management systems are less prevalent.

Astra Tech continues to maintain a European and US compliant quality management system at AstraZeneca's Mölndal site.

Product Regulation: Salick Health Care

The healthcare facilities which Salick Health Care administers on behalf of certain hospitals are subject to extensive federal, state and local legislation and regulations, such as those relating to the reimbursement and control of healthcare costs. The largest single component of Salick Health Care's revenue continues to be reimbursement at rates which are set or regulated by federal or individual state authorities. These reimbursement rates are subject to periodic adjustment for certain factors such as inflation, area wage indices and changes in legislation or regulations. The methods of reimbursement are subject to change as well. The ultimate impact of any such changes generally cannot be predicted.

Certain of Salick Health Care's operations are also subject to state licensing requirements such as certain present or prospective services of its managed care contracting subsidiary, SalickNet. Some states require that a certificate of need be obtained prior to construction of out-patient cancer centres, other healthcare facilities and the implementation or expansion of certain services, subject to certain exceptions. The Fraud and Abuse provisions of the Social Security Act generally proscribe the payment of any remuneration in return for the solicitation or receipt of a referral for services or items reimbursable under the Medicare or Medicaid programmes. Some states have adopted similar statutes. Federal laws

also prohibit a physician from referring Medicare or Medicaid patients to an entity for the provision of designated health services if the physician, or a party related to the physician, has an ownership interest in or compensation relationship with such entity, unless excepted. Such laws also prohibit an entity from billing for services rendered pursuant to a prohibited referral. Some states have adopted similar statutes. Legislation that may affect Salick Health Care is regularly introduced in the federal and state legislatures. Whether all such legislation will be enacted and, if so, its effect on Salick Health Care cannot be predicted.

Product Regulation: Zeneca Agrochemicals

The distribution and use of agricultural chemical products are regulated in each of Zeneca Agrochemicals' main markets. Regulatory authorities have become increasingly demanding about the data required to demonstrate the safety of crop protection chemicals during the registration and re-registration processes. The strictest standards are applied in the US, where the Environmental Protection Agency is the leading regulator, and in Japan and Western Europe. In the US, the Food Quality Protection Act, which came into force in August 1996, has resulted in even stricter requirements for the approval of crop protection chemicals. The licence for an agricultural chemical product is generally granted for a specific period, after which application must be made to re-register the product. It commonly takes between six and eight years after the identification of a lead compound to achieve registration of an agricultural chemical product containing that compound.

Zeneca Agrochemicals investigates the possibilities of enhancing desirable qualities of selected crops through biotechnology. In the European Union and the US, a rigorous, transparent and science-based regulatory system for the approval of genetically modified crops and food products is in place, which requires the output of several years of research trials. The already stringent regulatory environment is becoming more so, particularly in the European Union, with increasing public and media attention.

Product Regulation: Marlow Foods

Myco-protein is approved for sale in the European Union markets, as well as in a number of other countries worldwide.



INTELLECTUAL PROPERTY

AstraZeneca invested \$2.8 billion in its global R&D activities in 1999. Obtaining adequate protection for the intellectual property associated with these activities is thus a key business imperative. This protection includes patents, trade marks, design registrations, copyrights and Internet domain name registrations. AstraZeneca's policy is to seek out all opportunities for patenting, trade mark registration and other intellectual property protection which have a commercial value in supporting its lead identification and discovery, product development, manufacturing, marketing and other business activities. This policy is aimed at providing each of its new products with an effective shield of valid, enforceable patent and trade mark rights on an essentially global basis to protect it from unauthorised competition during its commercialisation. The adequacy of the patent and trade mark portfolio for individual products is continually reviewed during product development, clinical evaluation and early marketing so that, wherever possible, additional protection is sought for new applications and developments. Equally, AstraZeneca's ability to maximise the benefits of its investment in biotechnology, genomics and the enabling technologies of the research process, is maintained through an appropriate level of patent activity.

In recent years, there have been improvements in intellectual property protection, particularly in developing countries where the Trade Related Aspects of Intellectual Property (TRIPs) requirements of the General Agreement on Tariffs and Trade (GATT) agreement, obliges countries to introduce stronger, non-discriminatory patent protection for pharmaceutical and agrochemical products. As a result, patent protection is now available for the TRIPs minimum period of 20 years from the date of filing a patent application in most of AstraZeneca's major markets. This period of patent protection is eroded by the lengthy development time and regulatory review for

authorisation to market pharmaceutical and agrochemical products. In part, this has been recognised, so that a number of countries either allow for the extension of the basic patent term (for example the US and Australia) or provide similar rights to patents for an extended period (for example, supplementary protection certificates in the European Union). Similarly, a number of major countries now provide protection for up to 10 years for the proprietary data filed in applications for marketing authorisations.

As part of its normal business activity, AstraZeneca monitors competitor activity carefully and will enforce its intellectual property rights fully whenever appropriate. It will also defend vigorously any unwarranted challenge to its intellectual property rights.

Safety, Health and Environment

ASTRAZENECA SAFETY, HEALTH AND ENVIRONMENT POLICY

AstraZeneca's mission is to be first for innovation and value in the provision of products and services to improve human health and quality of life. Safety, Health and Environmental (SHE) considerations are core to this and all our activities shall take account of social, environmental and economic factors so as to:

- n Meet or exceed legal requirements, regulations and international agreements
- n Create a culture where SHE considerations are integrated into all activities across the group
- n Conduct business as a responsible corporate member of society committed to continual improvement in all aspects of our SHE performance
- n Provide a safe and healthy work environment for all our employees
- n Economise on the use of natural resources and work to minimise the impact on the environment
- n Aim to eliminate all injuries and incidents
- n Be among the industry leaders in SHE performance
- n Provide information on our SHE performance and communicate openly with all interested parties

1999 saw the merger of Astra and Zeneca, two companies with a strong commitment to high standards in SHE performance. The merger has given the new company the opportunity to combine the best practices from both predecessor companies to formulate an AstraZeneca SHE management system. SHE objectives for the forthcoming year have been agreed and SHE performance data for 1999 has been collated and evaluated.

SHE Management

A new AstraZeneca SHE policy, eight operational standards and a management system have now been approved by the Board and Senior Executive Team (SET). The policy is a statement of the company's fundamental SHE values and requirements and is a public document against which AstraZeneca's overall commitment and actual performance can be judged.

AstraZeneca's SHE management standards set out in general terms the basic systems and arrangements to comply with the AstraZeneca policy. Both the policy and the standards apply to all employees and activities and are mandatory across the company.

ASTRAZENECA SHE STANDARDS

- n Responsibilities and Commitment
- n Management of SHE
- n Communications and Consultation
- n Risk Management
- n Environmental Impact Reduction
- n Contractors, Toll Manufacturers and Suppliers
- n SHE Auditing and Monitoring
- n Annual Review and Improvement Plans

AstraZeneca's SHE management system provides a clear framework of management processes applicable at all AstraZeneca sites and locations. The system is consistent with international SHE management standards, such as ISO 14001, and is capable of external verification. Additionally, it will allow the SET and the Board to review the group's performance on an annual basis. Implicit in this review is the discussion of strategic issues and future objectives.

SHE Objectives

SHE objectives for 2000 have been set in the following areas:

- n Group implementation of the SHE management system
- n Group implementation of the SHE reporting system, including a Letter of Assurance
- n Evaluation of the potential for improvements in energy efficiency and appropriate targets
- n Commitment to continuous reduction of accidents, incidents and ill health cases

1999 SHE Performance

Performance data for AstraZeneca is reported in detail in the company's Safety, Health and Environment Report, available separately to this Annual Report & Form 20-F.



Costs and Liabilities

The group's expenditure on environmental protection, including both capital and revenue items, relates to costs which are necessary for meeting current good practice standards and regulatory requirements for processes and products.

They are an integral part of normal ongoing expenditure for maintaining the group's manufacturing capacity and product ranges and are not separated from overall operating and development costs. There are no known changes in environmental, regulatory or other requirements resulting in material changes to the levels of expenditure for 1997, 1998 and 1999.

In addition to expenditure for meeting current and foreseen environmental protection requirements, the group incurs substantial costs in investigating and cleaning up land and ground-water contamination. These are inherently difficult to estimate. The likely level of expenditure is estimated to be of the order of \$50 million per year over the next 2-3 years, the majority of which is covered by existing provisions. The level of such costs in the future, which are expected to continue to be substantial, will depend on a number of factors, including the nature and extent of any contamination that may ultimately be found to exist, the need for and type of any remedial work undertaken and the standards required by applicable current and future environmental laws and regulations.

Liabilities are generally more likely to crystallise where a contaminated site is to be sold, its use changed or where a regulatory authority imposes a particular remedial measure. Costs of these liabilities may be offset by amounts recovered from third parties, such as previous owners of the sites in question or through insurance, although the availability of pollution insurance and the scope for recovery under such insurance are uncertain, particularly in North America. Certain insurance coverage for environmental claims relating to several AstraZeneca group companies, including the Stauffer Management Company (SMC) matters referred to in Note 36 to the Financial Statements, is currently being contested by carriers. While some success has been achieved against insurance carriers, so far this has been limited for the most part to recovery of costs of defending the environmental claims. The outcome of the insurance litigation will affect the cost of addressing AstraZeneca's environmental liabilities.

As with the group's general investigation and clean-up costs described above, the level of costs that will be required of the group in connection with environmentally impaired sites will depend upon numerous factors; these include those described above, the number and financial viability of other potentially responsible parties, the group's percentage of responsibility for clean-up at any given site and the methods of remediation ultimately required. The relative importance of these factors varies significantly from site to site. Many sites are at different stages in the regulatory process or at different stages in the process of evaluating environmental damage or alternative remediation methods. It is therefore difficult to form meaningful ranges of estimates for such costs.

AstraZeneca's operations in Sweden are pursuant to the Swedish Environmental Code, subject to licensing and reporting liabilities. There are currently three licences for the operations in Södertälje and separate licences for the Karlskoga and Strängnäs operations. A licence is also held for Astra Tech AB in Mölndal. AstraZeneca's most significant impact on the environment comprises solvent emissions into the air, together with waste and wastewater.

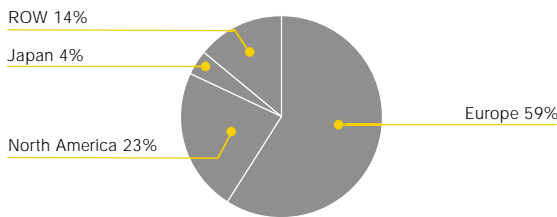
The increasingly stringent demands now being made on operations with a licensing liability have resulted in the ongoing licensing reviews of the research facilities in Mölndal and Lund. The environmental licence for the Snäckviken (Södertälje) operations will be renewed in the coming year as a result of the building of a new steam producing plant.

People and Community

Building a new culture

The merger of Astra and Zeneca combined a wealth of experience and skills which are key to AstraZeneca's future success. With over 55,000 employees worldwide, the company recognises that the competence, motivation and performance of its people is fundamental to long term success and that diversity and creative potential are among its most valuable assets. A main priority since the merger has been to develop and widely communicate the new company values and operating principles, and to build a culture which unites employees in a common purpose.

PERCENTAGE OF EMPLOYEES BY GEOGRAPHIC AREA (at end 1999)



At the heart of the new culture is AstraZeneca's ambition to be one of the world's great companies through leading innovation and delivery of value to its stakeholders. Success depends on a shared understanding and commitment to this aim among AstraZeneca's people.

AstraZeneca is creating a dynamic performance culture in which all employees understand the impact they have on the company's objectives and how they benefit from achieving high levels of performance. To help them achieve their best, employees are encouraged and supported in developing their potential to the full, in line with business needs, against a background of equal opportunity where individual success is based solely on personal merit and performance. Respect, openness, honesty and trust are cornerstones of the new culture and leadership by example at all levels is expected.

An ongoing and comprehensive internal communications process, engaging all employees in their respective teams, aims to ensure that the new values and principles are widely understood and rapidly embedded in the developing culture. The development of the new corporate culture will also be supported by international leadership programmes and comprehensive information on the company's internal websites. Feedback will be obtained through global attitude surveys.

In order to enable AstraZeneca to attract and retain excellent people, the company is strongly committed to becoming an employer of choice in all parts of the world. Planning procedures are being implemented in order to ensure that key positions can be appropriately staffed at all times and a pool of future leaders will be created through development processes engaging all parts of the business.

Contributing to the community

AstraZeneca recognises the importance of good relations not just with shareholders, customers and employees, but with all those in society who have an interest in the company's activities and progress. Improvement in environmental performance, responsible labour practices, ethical conduct and an enhanced appreciation of the role of business in society flow from AstraZeneca's interaction with many organisations in the voluntary sector.

AstraZeneca's sponsorship programmes include a range of community, medical and environmental initiatives and all are consistent with the company's aim of improving health and quality of life. In the US, for example, AstraZeneca sponsors National Breast Cancer Awareness Month, the nation's largest collaborative public education programme in cancer which focuses on the importance of early detection.

In Sweden, AstraZeneca supports a programme developed in collaboration with the local healthcare community which offers specialised training for nurses and doctors wishing to set up dedicated Asthma Treatment Units. These units offer patients with asthma the opportunity to learn more about their illness and how to control it.

AstraZeneca's products are all the result of successful science and the company is committed to promoting the value of science within the community. It supports a range of science-based schools' programmes which aim to foster understanding and encourage young people's interest. In the UK, the AstraZeneca Science Teaching Trust, an independent charity with a total trust fund of \$32 million, supports a programme of projects designed to help build the knowledge, skills and understanding required to lead and teach science effectively and confidently in primary schools.

Last year, AstraZeneca donated \$20 million to charity, including a donation of \$16 million to the AstraZeneca Science Teaching Trust. Where possible, the company also responds to crisis appeals and in 1999 made contributions to disaster funds for Colombia, Kosovo and Turkey.



Introduction

The purpose of the Financial Review is to provide a discussion of the 1999 results for the year compared to the prior year in total for the group and by business. It also provides details of material movements between 1998 and 1997. Following the merger, the financial information presented has been restated onto a combined basis and the discussion below reflects the restated results.

AstraZeneca conducts its business with a view towards long-term growth of profits, which is largely dependent on a flow of new products and product enhancements deriving from substantial and continuing investment in R&D.

AstraZeneca's operating results can be affected by a number of factors, the most important of which are new product introductions, the expiry of patents, fluctuation of exchange rates, general economic conditions and the regulatory environment. These factors are important to the long-term development of the group and may also affect AstraZeneca's short-term performance. AstraZeneca's results are also affected by the integration of the two former companies following the merger and the disposal of the Specialties business on 30 June 1999.

In general terms, the performance in the market place of new products and product extensions and competition from manufacturers of patented and generic products still tend to influence the results of pharmaceuticals companies more than general economic conditions. For AstraZeneca, the expiration of patents covering the compound omeprazole contained in *Losec* (*Prilosec* in the US) in different markets may adversely affect its operating results in the future. Launches of new products, which begin in the second half of 2000 with *Nexium*, are likely to have a positive impact in reducing any such effect. The success of *Nexium* will depend, among other things, on the rate of customer uptake of the product and the timing of generic omeprazole availability in the market place.

AstraZeneca's business will continue to be affected by competition and pressure to contain healthcare expenditure in a number of countries, including the US (AstraZeneca's largest market), as governments and other bodies increasingly seek to control costs. Results may also be affected during any one period by buying patterns for its products (e.g. speculative buying by wholesalers).

Salick Health Care's turnover has remained static in the year. The business has undertaken a review of its operations resulting in rationalisation and significant reduction in its activities with a view to returning the core business to profitability.

On 2 December 1999 it was announced that agreement had been reached to spin off Zeneca Agrochemicals and merge the business with the agrochemicals and seeds activities of Novartis to form Syngenta AG. Zeneca Agrochemicals' results are affected by the relative maturity of the agricultural chemicals industry in the developed world, general economic conditions, weather conditions (which can influence the demand for certain products) and crop prices. Zeneca Agrochemicals' results are also increasingly affected by the growing importance to agriculture of biotechnology and the use of genetically modified crops. Agrochemicals' sales and operating profit are weighted towards the first half of the year, primarily reflecting planting and growing cycles in the northern hemisphere.

On 30 June 1999 the sale of Zeneca Specialties (with the exception of Marlow Foods which will remain part of AstraZeneca) was completed. Specialties comprised a range of businesses including Biocides, Industrial Colours, LifeScience Molecules, Performance and Intermediate Chemicals, Resins and Stahl leather products. The business operated across 35 sites worldwide employing approximately 5,500 people.

During 1999 the group revised its dividend policy. Following changes in tax treatment of dividends and the removal of tax costs on companies repurchasing their own shares, the new distribution policy contains both a regular dividend cash flow and a share repurchase component giving the company more flexibility in managing its capital structure over time.

AstraZeneca's largest market is the Americas, which accounted for 52% of total sales (by customer location) in 1999 whilst Europe (including the UK) accounted for 36%. The UK and Sweden are AstraZeneca's most important manufacturing locations and were also the source of exports of approximately \$6.4 billion in 1999 to external customers and to AstraZeneca's worldwide subsidiaries.

Following completion of the merger, the US dollar is considered the primary currency in which the group conducts its business. Consistent with this, the parent company has redenominated its share capital into US dollars. Accordingly the group now operates as a dollar based entity and also presents its financial statements in US dollars. However, significant but differing proportions of AstraZeneca's revenues, costs, assets and liabilities remain denominated in currencies other than US dollars. Approximately half of AstraZeneca's sales in 1999 were denominated in currencies other than the US dollar while a significant proportion of AstraZeneca's manufacturing and research costs are denominated in pounds sterling and Swedish kronor. As a result, AstraZeneca's operating profit in US dollars can be affected by movements in exchange rates, in particular movements of the pound sterling,

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euro, Swedish kronor and Japanese yen against the US dollar. In the absence of hedging, appreciation of the US dollar against other currencies generally has an adverse impact on AstraZeneca's results while a depreciation of the US dollar has a positive impact. In 1999 the US dollar appreciated against most major currencies, particularly the euro, and depreciated against the Japanese yen.

It is estimated that the effect of these currency movements was to reduce sales by approximately \$160 million and operating profit by some \$50 million (net of hedging benefits).

AstraZeneca's policy, where appropriate, is to seek to reduce the impact of exchange rate movements on its transactional exposures through the purchase of forward foreign exchange contracts or options, and to reduce the impact of exchange rate movements on its long-term economic position by structuring debt to reflect the currencies of the underlying asset base and investing surplus liquidity in US dollar denominated deposits.

AstraZeneca's businesses require high levels of investment in the research, development, licensing and launch of new products, and the enhancement of existing products. This activity provides the dynamic for AstraZeneca's existence and growth, and the resulting products and related intellectual property are amongst the group's most valuable assets. The areas covered range from initial broad-range research, including collaboration with other parties, through targeted exploratory development, regulatory approval, and commercialisation, to individual product support in the market. Products may also be licensed at any particular stage of development. AstraZeneca's R&D expenditure increased by 18% in 1999 to \$2,923 million. These research, development and licensing costs, together with launch costs, are likely to remain a significant feature of the cost base as new products are successfully brought to market.

In addition to its pharmaceuticals' business, AstraZeneca conducts operations in the agrochemicals sector and, until its

disposal in June 1999, specialty chemicals. Mainly as a result of these activities, AstraZeneca has environmental liabilities attributable to past events at some currently or formerly owned, leased and third party sites in the US. The requirement in the future for AstraZeneca ultimately to take action to correct the effects on the environment of prior disposals or release of chemical substances by AstraZeneca or other parties, and its cost, pursuant to environmental laws and regulations, is inherently difficult to estimate. AstraZeneca had provisions at 31 December 1999 in respect of its best estimate of such costs and most of the environmental provisions related to non-operating sites in the US, many of which were acquired as part of Stauffer Chemical Company in 1987. Although there can be no assurance, management believes that, taking account of these provisions, the cost of addressing currently identified environmental obligations, as AstraZeneca currently views these obligations, is unlikely to impair materially AstraZeneca's financial position. Such contingent costs, to the extent that they exceed applicable provisions, could have a material adverse effect on AstraZeneca's results of operations for the relevant period.

Results of operations

The tables below set forth sales and operating profit for AstraZeneca.

In addition to merging the historical results of Astra and Zeneca under UK GAAP, as shown under the statutory heading in the tables and reflected in the financial statements, the pro forma sales and operating profit figures shown below include two further adjustments to the statutory figures to illustrate the effect on sales and operating profits as if the Astra Merck restructuring and the merger related payments to Merck had occurred at the beginning of 1998 (rather than July 1998 and April 1999 respectively). The directors consider that pro forma information for 1998 provides a more meaningful basis by which to measure the actual results of the business for 1999. Therefore the following analysis and discussion of results refers to pro forma growth rates (unless noted otherwise).

ASTRAZENECA SALES

	Statutory			Pro Forma	
	1999	1998	1997	1998	1997
	\$m	\$m	\$m	\$m	\$m
Healthcare	15,042	11,223	9,124	12,938	11,461
Pharmaceuticals	14,834	11,015	8,926	12,730	11,263
Salick Health Care	208	208	198	208	198
Other trading	92	95	78	95	78
Ongoing operations	15,134	11,318	9,202	13,033	11,539
Agrochemicals (to be discontinued)	2,657	2,790	2,605	2,790	2,605
Specialties (discontinued)	654	1,294	1,359	1,294	1,359
Total	18,445	15,402	13,166	17,117	15,503



Year to 31 December 1999

All narrative in this section refers to pro forma growth rates and excludes the effects of exchange rate movements (unless noted otherwise).

Summary

AstraZeneca's sales for the year ended 31 December 1999 were \$18,445 million, an increase of 9%. The group's operating profit before exceptional items was \$3,908 million for the year, an increase of 12%.

The core pharmaceutical business delivered full year sales and profits growth of 18% and 19% respectively. Importantly this growth has not only come from the continued success of *Losec/Prilosec* and *Zestril* but also by excellent performances from a range of newer products including *Casodex* (\$340 million), *Seroquel* (\$232 million) and *Atacand* (\$171 million). A particularly strong performance was registered in the US with sales growth of 23%.

In Zeneca Agrochemicals, sales fell by 5% whilst operating profit declined by 21% and, excluding the ISK integration costs charged in 1998, by 29%. Sales in Europe and the rest of the world increased but this growth was more than offset by declines in the Americas.

The majority of the Specialties business was disposed of in the year for \$2 billion, resulting in a pre-tax gain of \$237 million after separation and other costs.

The group has incurred significant exceptional costs in 1999. An exceptional charge, against operating profits, of \$864 million has been incurred for the AstraZeneca integration and synergy programme (discussed in more detail on page 39) and \$28 million costs to complete the rationalisation of Astra's US operations following the Astra Merck restructuring have been charged. \$145 million has been incurred as a consequence of refocusing the Salick Health Care business and \$125 million in respect of restructuring projects commenced by Zeneca

Agrochemicals. Exceptional items charged below operating profit include merger costs of \$1,013 million, including the \$809 million R&D related payment to Merck, and the disposal of the Specialties business resulted in an exceptional gain before tax of \$237 million.

Joint ventures and associates in 1999 consist largely of results from AstraZeneca's 50% share in Advanta B.V., the seeds joint venture with Cooperatie Cosun U.A.. The group's share of Advanta's 1999 operating loss was \$6 million compared to a profit of \$8 million in 1998. The statutory results in 1998 and 1997 include the group's share of the results of Astra Merck Inc., the former joint venture in the US with Merck, until its restructuring in June 1998.

The statutory net interest expense for the year was \$4 million, compared to income of \$47 million in 1998, reflecting the lower levels of cash balances in the year as a result of the major exceptional costs and other investments (particularly the first option payment of \$967 million to Merck and \$276 million in relation to the reacquisition of marketing rights).

The group taxation charge for 1999 for ongoing operations was \$1,048 million representing an effective tax rate of 29.5% (1998 29.0%). The total tax charge after exceptional items for 1999 was \$815 million representing an effective rate of 41.6% (1998 29.4%) reflecting restricted tax relief available on exceptional items.

AstraZeneca PLC paid a first interim dividend for 1999 on 25 October 1999 of \$0.23 per \$0.25 Ordinary Share. A second interim dividend for 1999 of \$0.47 per \$0.25 Ordinary Share has been declared, which the Annual General Meeting will be asked to confirm as the final dividend. This, together with the first interim dividend, makes a total of \$0.70 for the year in line with the new dividend policy announced during the year. This policy (in the absence of unforeseen circumstances) anticipates that dividends will be maintained at \$0.70 per Ordinary Share until earnings cover dividends by between two and three times (thereafter, dividends are intended to be grown in line with earnings).

ASTRAZENECA OPERATING PROFIT

	Statutory			Pro Forma
	1999	1998	1997	1998
pre exceptional items	\$m	\$m	\$m	\$m
Healthcare	3,595	2,573	2,377	3,029
Pharmaceuticals	3,603	2,587	2,372	3,043
Salick Health Care	(8)	(14)	5	(14)
Other trading	(25)	(27)	(27)	(27)
Ongoing operations	3,570	2,546	2,350	3,002
Agrochemicals (to be discontinued)	267	359	365	359
Specialties (discontinued)	71	146	142	146
Total	3,908	3,051	2,857	3,507

Financial Review

Ongoing operations - 1999 compared with 1998 Healthcare – 1999 compared with 1998

Gastrointestinal

Gastrointestinal sales grew by 24% to \$5,957 million in the year. The growth was driven by the *Prilosec* US prescription market share which increased to 32.6%. Strong sales of *Losec* in France, reflecting an increase of 51% mainly due to co-prescribing with NSAIDs, were offset by a decline of 27% in Germany (due to generic competition). Proton Pump Inhibitors continued to expand their share of the US anti-secretory market where total prescription share was 62% (compared with 54% at December 1998).

Cardiovascular

Strong market share growth continued in the cardiovascular area with sales increasing by 14% to \$3,416 million.

US prescription growth for *Zestril* remained strong with total prescription share standing at 24.6% at the end of December; annualised total prescription volume growth for *Zestril* at 16.3% for the year continues to outstrip the ACEi class (5.3% for the same period). Sales of *Zestril* worldwide grew by 9% to \$1,221 million. *Atacand* sales grew strongly in all markets (up 312% to \$171 million) with US prescription share standing at 6.2% (total scripts) and 7% (new scripts) at the end of the year. *Seloken* US prescription growth continues to be strong with a total market share of 13.2% at the end of December; sales grew by 19% to \$531 million worldwide. *Plendil* sales were strong due to the securing of new guaranteed volume contracts with US healthcare providers, and overall increased to \$452 million (up 24%).

Respiratory

Respiratory sales grew by 10% to \$1,339 million.

Prescription demand for *Pulmicort* in the US, the fastest growing market for the product, remained strong despite supply constraints due to manufacturing difficulties which are now showing signs of easing. Worldwide sales grew by 9% to \$730 million. *Accolate* US total prescription market share stood at 6.8% at the end of the year with new prescription share at 5.1%. Growth has been restricted to 4% to \$156 million although the launch of paediatric indications in the US have improved sales late in the year. *Rhinocort* sales growth was 8% to \$167 million and the launch of *Rhinocort Aqua* in the US in early 2000 has the potential to stimulate growth. A new indication for *Oxis Turbuhaler*, for 'as needed' treatment of asthma symptoms, was approved by the European regulators in December and should stimulate further growth. The first European filing for *Symbicort* was made in December; *Symbicort* combines the proven benefits of *Pulmicort* with those of *Oxis* in a single inhaler to provide compliance and convenience benefits to patients.

SALES BY THERAPEUTIC AREA/KEY PRODUCTS

Pro Forma Combined

	% of total	1999 \$m	1998 \$m	% CER growth
Gastrointestinal	39	5,957	4,845	+24
<i>Losec/Prilosec</i>	39	5,909	4,799	+24
Cardiovascular	23	3,416	3,017	+14
<i>Zestril</i>	8	1,221	1,126	+9
<i>Seloken</i>	4	531	450	+19
<i>Tenormin</i>	3	509	502	+2
<i>Plendil</i>	3	452	367	+24
<i>Atacand</i>	1	171	43	+312
Respiratory	9	1,339	1,256	+10
<i>Pulmicort</i>	5	730	691	+9
<i>Rhinocort</i>	1	167	158	+8
<i>Accolate</i>	1	156	152	+4
<i>Bricanyl</i>	1	142	154	-5
<i>Oxis</i>	1	87	44	+107
Oncology	12	1,764	1,538	+15
<i>Zoladex</i>	5	686	626	+9
<i>Nolvadex</i>	4	573	526	+7
<i>Casodex</i>	2	340	245	+41
<i>Arimidex</i>	1	140	121	+19
Specialist/Hospital	16	2,358	2,074	+15
<i>Diprivan</i>	4	608	653	-6
<i>Xylocaine</i>	2	249	240	+2
<i>Seroquel</i>	2	232	66	+254
<i>Zomig</i>	1	189	102	+88
<i>Merrem</i>	1	153	128	+29
<i>Marcaïne</i>	1	88	80	+11
<i>Astra Tech</i>	1	111	100	+15
Salick Health Care	1	208	208	-

Oncology

Oncology sales grew by 15% to \$1,764 million led by strong demand for *Casodex* in all markets.

Casodex consolidated its leadership position and first approvals were received for monotherapy which should continue to promote future growth. 1999 saw sales increase to \$340 million. *Arimidex* continues to grow strongly maintaining its number one position (sales up 19% to \$140 million). Impressive clinical results in first line breast cancer were



announced late in the year and these should provide a strong basis for future development of the product. The growth of *Nolvadex* sales (an increase of 7% to \$573 million) represents increased prescribing in the US following the publication of positive data across a range of indications, including reduction of risk of developing breast cancer. *Zoladex* continues to grow well (up 9% to \$686 million) despite a highly competitive pricing environment, particularly in the US. Significant new survival data in both early breast and prostate cancer for *Zoladex* was published during the year.

Specialist/Hospital

Specialist/Hospital sales saw an increase of 15% driven by strong growth in *Seroquel* and *Zomig*.

Seroquel continues to gain market share in the US as a result of increasing acceptance of the benefits of the product; total prescription market share was 7.4% at the end of December 1999 with new prescription share increasing to 8.5%.

Seroquel was the leading brand in the US in gaining 'switch' business within the atypical class of antipsychotics and sales increased worldwide to \$232 million (up 254%). Following the approval of *Seroquel* through the European mutual recognition process in December, the launch of *Seroquel* in Germany and Italy is scheduled for the first half of 2000 and further global roll-out is expected during the rest of the year. *Zomig* continues to capitalise on the steady move to triptan therapy in the US and France with worldwide sales of \$189 million. It should benefit from the launch of new formulations. Demand for *Merrem* remained strong in all markets with sales up 29% to \$153 million. Supply constraints in the US due to manufacturing difficulties earlier in the year have adversely affected sales growth, although the situation is now improving.

The decline in *Diprivan* sales (down by 6% to \$608 million) is due to the increased penetration of a generic formulation in the US market. Further details are given in Note 36 to the Financial Statements. *Diprivan* volume growth in Europe continues in double digits, including Germany where generics have been on the market since 1997. Sales in Japan grew by 75% benefiting from the launch of new indications and the ongoing expansion and acceptance of intravenous anaesthesia.

Geographic analysis

Sales grew in the US by 23%. Continued strong sales growth in most European markets was led by France where sales were up 27%. Sales volume growth in Japan continued to exceed market growth driven by new indications for key products.

Research and development

Pharmaceuticals' R&D expenditure increased by 13% to \$2,454 million, declining slightly as a percentage of sales to 16.5%. Through the consolidation of the two R&D functions synergy benefits of \$20 million have been realised in 1999 and further benefits should accrue in the next two years. A thorough review has been completed of all R&D activities leading to a more focused development portfolio which comprised 57 new chemical entities and approximately 159 projects at year end. Since then licensing agreements on MUSE, mosapride and seratrodist have been terminated. All major projects continue to make good progress towards their defined profiles and against clear milestones.

Operating margin

Pharmaceuticals' operating margin, before exceptional items, for 1999 increased to 24.3%. The benefits from the synergy programme are beginning to flow through but the full benefit was offset by an increased proportion of contingent payments to Merck and the cost of terminating licence agreements. In 2000 further benefits are anticipated from the synergy programmes. At least a further 1% is expected to fall through to improved margins in 2000, with further improvement dependent on the scale of resources required to maximise the full potential of *Nexium* and the other late stage projects nearing the market.

Exceptional items

Exceptional charges against 1999 operating profits totalled \$892 million, comprising \$864 million for the AstraZeneca integration and synergy programme and \$28 million to complete the work commenced in 1998 to rationalise Astra's US operations following the Astra Merck restructuring. In addition, charges against profit before tax comprised merger costs of \$1,013 million, including the \$809 million R&D related payment to Merck. The latter amount reflects the recent outcome of the arbitration hearing and includes related costs.

Synergy and integration programme

At the announcement of the merger, the synergy and integration plans were based on a preliminary view of what the opportunities and issues could be. Following completion of the merger, integration task forces were established and in November 1999 a complete set of synergy and integration plans including financial targets were agreed. During 1999 there was minimal disruption arising from the integration and the pace of implementation resulted in synergy savings ahead of plan.

Financial Review

The synergy plans include initiatives to remove duplicate activities throughout the organisation and to rationalise the number of facilities around the world. Total synergy and integration costs of \$864 million were recorded in the year relating to these initiatives.

The major elements of the total charge are:

	\$m
Manpower related costs	379
Legal costs (including name changes)	56
IS integration costs	145
Site closures	40
External advisors	104
Other	140
	864

Of the total charge, \$316 million related to integration activities and \$548 million to synergy plans.

The manpower costs are designed to deliver approximately 6,000 job reductions worldwide and include severance and early retirement payments. These job reductions affect the majority of business functions, job types and geographic locations. The impact of the job reductions is likely to be approximately 50% in Europe, 30% in North America and 20% in the rest of the world.

IS integration costs have been incurred in ensuring that the two companies move quickly onto common systems platforms using, principally, existing systems. Significant further IS synergies are anticipated, the costs of which have not been included above.

The actual cash expenditure in 1999 on synergy and integration costs was \$303 million of which the main elements were manpower related costs amounting to \$150 million.

The total programme cost is currently estimated at \$1,300 million and the major proposed areas of expenditure are:

	\$m
Manpower related costs	450
Legal costs	60
IS synergy and integration costs	370
Site closures	40
External advisors	170
Other	210
	1,300

The annual benefits expected to be delivered from the programme total \$1.1 billion, of which approximately two thirds will arise in selling, general and administrative expenses, 25% in research and development and the remainder in production and distribution. Actual benefit delivery in 1999 was \$130 million, of which \$100 million was in selling, general and administrative expenses, \$20 million in research and development and \$10 million in production and distribution. The business remains on track to deliver benefits of \$500 million in 2000.

Salick Health Care

Salick Health Care made a loss of \$153 million after an exceptional charge of \$145 million was made against operating profit following the decision to refocus the business on a smaller base of profitable cancer centres and to recognise the impairment of certain asset carrying values.

Other trading

Other trading comprises Marlow Foods together with certain corporate operations including insurance and environmental activities. Sales by Marlow Foods were unchanged from 1998 at \$92 million.

Agrochemicals – 1999 compared with 1998

Sales for the full year decreased by 5%; operating profit decreased by 21%, and excluding the ISK integration costs charged in 1998, by 29%. Towards the end of the year trading improved with strong sales performances in Europe and Asia Pacific more than offsetting the impact of continuing adverse trading conditions in the Americas.

Touchdown sustained volume growth of over 20% for the full year; selective herbicide sales were affected by further penetration of genetically modified crops in addition to generally adverse conditions.

The impact in the Americas of low farm incomes and low insect infestation in many crops depressed insecticide sales; *Karate* sales were down 13% compared to last year.

Amistar, with 1999 sales of \$415 million three years following launch, is now the world's leading proprietary fungicide and sales grew by over 40% in 1999 with growth continuing in all markets.

Geographic analysis

Sales in North America and Latin America fell by 12% and 18% respectively compared to 1998 while sales in Europe and the rest of the world increased by 5% and 8% respectively. Adverse trading conditions depressed overall demand in both



North and Latin America and tight credit policies were maintained in Argentina and Brazil in difficult economic conditions. Growth in Europe, driven largely by *Amistar*, resulted in share gains in a contracting market with little recovery in Eastern Europe. The business took advantage of a steady recovery in the markets of Asia Pacific to achieve full year sales growth of 12%.

Research and development

Significant progress was made during 1999 in R&D; investments in new manufacturing plants were approved for two late stage development compounds, the corn herbicide mesotrione and the second generation strobilurin, picoxystrobin. R&D expenditure increased to \$297 million (1998: \$286 million); the increase was largely associated with new collaborations in biotechnology research.

Operating margin

1999's operating margin before exceptional items reduced from 12.9% to 10.0%; in addition to the margin impact of lower sales, research costs increased as a result of the expanding biotechnology programme and there were additional fixed manufacturing costs following *Amistar* and *Touchdown* plant capacity increases.

Advanta

Contribution for the full year from Advanta was reduced due to poor trading conditions in the seeds sector.

Exceptional items

During 1999, Zeneca Agrochemicals undertook a number of restructuring projects designed to improve profitability. These measures resulted in a charge of \$125 million including some 600 job reductions, equivalent to 8% of total employees, and are expected to yield annual savings of approximately \$50 million per annum from 2000. Substantially all of the charge is expected to be spent before the end of 2000.

Syngenta

To be formed from the spin-off and merger of the Agrochemicals business with the agrochemicals and seeds activities of Novartis, Syngenta AG will be the world's first global dedicated agribusiness with a combined ranking of number 1 in crop protection (no. 3 in seeds).

For the financial year ended 31 December 1998 the combined total sales of Syngenta were \$7.9 billion and combined EBITDA (earnings before interest, tax, depreciation and amortisation) were \$1.6 billion. Combined research and development investment in the same period was approximately \$700 million.

Syngenta, in which AstraZeneca shareholders will hold 39% of the shares, will be listed on four major stock exchanges. Syngenta's capital structure will target total long term debt of approximately \$3.5 to \$4.0 billion to enable a repurchase of shares and repayment of parental debt.

Work on the formation of Syngenta is proceeding to plan and completion of the transaction is expected before the end of 2000.

Specialties – 1999 compared with 1998

The sale of the Specialties business was completed on 30 June 1999 for \$2 billion. The exceptional gain before tax on the disposal of Specialties was \$237 million and generated net cash of \$1.6 billion. Sales were \$654 million compared to \$1,294 million in the whole of 1998 reflecting the disposal. Operating profit for the period until disposal was \$71 million compared with \$146 million in 1998.

Year to 31 December 1998

All narrative in this section is on a pro forma basis and excludes the effects of exchange rate movements (unless noted otherwise).

Summary

AstraZeneca's sales for the year ended 31 December 1998 were \$17,117 million compared with \$15,503 million during the same period in 1997. On a statutory basis AstraZeneca's profit before tax and exceptional items was \$3,637 million for the year compared to \$3,660 million in 1997, a marginal decrease.

Pharmaceuticals' sales increased to \$12,730 million, driven by growth in new products and successful lifecycle management of more mature products. Sales in the US were up 27%. Pharmaceuticals' operating profit before exceptional items increased to \$3,043 million or 23.9% as a percentage of sales. Pharmaceuticals R&D expenditure increased to \$2,178 million representing a 17% expenditure to sales ratio.

On 1 July 1998, agreement was reached with Merck & Co., Inc. pertaining to the US market. The agreement gave AstraZeneca management control of the operations in the US and made possible, on 1 July 1998, the combination of the operations of the previously half-owned company Astra Merck, Inc., and the wholly owned subsidiary Astra USA, Inc., in a new company, Astra Pharmaceuticals, LP. Through this arrangement, AstraZeneca achieved strategic freedom and the right to buy out Merck's interest at certain points in time.

Financial Review

On 4 September 1998, AstraZeneca acquired the pharmaceuticals business of Orica Ltd (formerly ICI Australia Ltd) for some \$200 million. Prior to the acquisition, Orica's Pharmaceuticals business acted primarily as the exclusive distributor for AstraZeneca Pharmaceuticals' products in Australia, New Zealand and surrounding territories. Accordingly, the acquisition provides AstraZeneca with direct access to the Australian and New Zealand pharmaceutical markets.

In December 1998, AstraZeneca reached two agreements with Schering-Plough Corporation. As of 1 January 1999, AstraZeneca re-acquired all rights to market omeprazole under the *Losec* trademark and felodipine under the *Prevox* and *Perfudal* trademarks in Italy and Spain. Payments are expected to amount to approximately \$800 million, to be paid in instalments over at least a five year period. The agreement enabled AstraZeneca to maintain and further develop its market-leading position in the gastrointestinal area and resolved a disagreement concerning the previous licensing agreement with Schering-Plough. Under a separate agreement, Schering-Plough acquired an extension and widening of its marketing rights in the US with respect to *Imdur*. Pursuant to this agreement AstraZeneca recorded a gain of \$163 million.

In Agrochemicals, the outstanding feature of 1998 was the success achieved in the fungicides sector. At the end of 1998 *Amistar* was approved for sale in 46 countries on 43 crops. The absorption of the US-based fungicide business of ISK, acquired in early February 1998 for some \$400 million, proceeded successfully and quickly with an important contribution to sales from the leading brand, *Bravo*. These two products drove total fungicide sales to \$651 million. Herbicide and insecticide sales in 1998 declined slightly compared to 1997.

In Specialties, profits grew to \$146 million including the benefits of the restructuring and reshaping activities of the previous several years, aimed at producing a much better quality business. Consistent with that strategy, AstraZeneca decided to close the Organophosphate Intermediates business and cease manufacture with effect from the end of June 1998, with a resultant exceptional item of \$46 million being charged against profit (\$13 million cash costs of closure, \$33 million write-down of assets). The core businesses within Specialties continued to grow steadily, with the newer businesses – such as LifeScience Molecules – producing particularly encouraging results.

The statutory net interest income for the year was \$47 million compared to \$81 million in 1997, reflecting the reduction in cash balances due to acquisitions.

The group taxation charge for 1998 was \$1,086 million representing an effective tax rate of 29.4%, or 29.7% before exceptional items.

Ongoing operations – 1998 compared with 1997 Healthcare – 1998 compared with 1997

Gastrointestinal

Sales of *Losec* (*Prilosec* in the US), the dominant product in AstraZeneca's gastrointestinal area, amounted to \$4,799 million representing an increase of 21%. The growth was primarily attributable to the fact that *Losec* represents an important advancement in the treatment of acid-related ailments of the duodenum, stomach and oesophagus. Including sales through licencees, the *Losec* share of the peptic ulcer market in Europe, in terms of value, was 45% in 1998 compared with 44% in 1997. In the US and Japan, the *Losec* market share in 1998 was 46% and 4%, respectively, compared with 38% and 5%, respectively in 1997. Including sales through licencees, the *Losec* share of the global peptic ulcer market rose to 41% in 1998 compared to 36% in 1997. The decline in the market for the competing H2 blockers and the expiration of the patent for the H2 blocker ranitidine in some markets contributed to this development.

Cardiovascular

Sales of *Zestril* grew by 10%; in the US sales were up 15% following a strong second half, with *Zestril* becoming the most prescribed ACE inhibitor in this market, securing a 22.7% market share. Sales of *Seloken* amounted to \$450 million in 1998, an increase of 11%. This increase was mainly due to higher sales of *Seloken ZOK*, an improved dosage form compared with the original *Seloken* tablets. Sales of *Plendil* amounted to \$367 million in 1998 an increase of 14%. The new antihypertensive agent *Atacand* was launched in nearly 20 countries during 1998, including France, Italy, Spain and the US.

Respiratory

Sales of *Pulmicort*, an asthma drug, increased by 11% to \$691 million. Prescription volume for *Pulmicort Turbuhaler* in the US rose steadily during the second half of 1998 although market penetration in the US initially developed more slowly than originally anticipated due in part to supply constraints caused by manufacturing difficulties. *Accolate* sales increased by 78% to \$152 million and the results of the ACCEPT study showing improved control of asthma in all patient groups were released in the US during the fourth quarter of 1998. Sales of *Rhinocort* amounted to \$158 million in 1998, a decrease of 2%.

Oncology

Zoladex sales grew by 13%. Market share continues to increase, particularly in the US where contract-based programmes at competitive prices are securing higher volumes. Sales of *Casodex* grew by 24% further strengthening its position as the number one anti-androgen. *Arimidex* is now firmly established as the aromatase inhibitor of choice in most



SALES BY THERAPEUTIC AREA/KEY PRODUCTS

Pro Forma Combined

	% of total	1998 \$m	1997 \$m
Gastrointestinal	37	4,845	3,977
<i>Losec/Prilosec</i>	37	4,799	3,942
Cardiovascular	23	3,017	2,856
<i>Zestril</i>	9	1,126	1,036
<i>Seloken</i>	4	502	553
<i>Tenormin</i>	3	450	415
<i>Plendil</i>	3	367	339
<i>Atacand</i>	0	43	1
Respiratory	10	1,256	1,134
<i>Pulmicort</i>	5	691	646
<i>Rhinocort</i>	1	158	165
<i>Bricanyl</i>	1	154	167
<i>Accolate</i>	1	152	86
<i>Oxis</i>	0	44	-
Oncology	12	1,538	1,369
<i>Zoladex</i>	5	626	570
<i>Nolvadex</i>	4	526	502
<i>Casodex</i>	2	245	200
<i>Arimidex</i>	1	121	82
Specialist/Hospital	16	2,074	1,927
<i>Diprivan</i>	5	653	569
<i>Xylocaine</i>	2	240	251
<i>Merrem</i>	1	128	99
<i>Zomig</i>	1	102	20
<i>Marcaine</i>	1	80	89
<i>Seroquel</i>	1	66	52
<i>Astra Tech</i>	1	100	91
Salick Health Care	2	208	198

markets and sales increased by 47%. *Nolvadex* sales overall increased by 6% and by 11% in the US. During the year excellent clinical data were reported on the use of *Nolvadex* in the long-term treatment of breast cancer and approval was received in the US for the use of *Nolvadex* in the reduction of risk of breast cancer.

Specialist/Hospital

Diprivan sales grew by 17%. Sales in the US were up 37% largely due to the increased penetration of the ICU market. *Xylocaine* remained the most widely used local anesthetic in the world with sales of \$240 million in 1998, a decrease of 1%. Sales of *Seroquel* were \$66 million, held back in the first half of the year by overstocking by US wholesalers at the end of 1997. *Merrem* sales grew by 40% to \$128 million.

Salick Health Care

Salick Health Care's sales increased by 7% to \$208 million. An operating loss of \$14 million, after absorbing Year 2000 costs of \$13 million, reflects reduced reimbursement rates together with continued investment in both the internal infrastructure and the network expansion of cancer clinics.

Other trading

Sales of *Quorn* grew by 15% through product range expansion.

Agrochemicals - 1998 compared with 1997

On a statutory basis, sales were up 7% and operating profit declined by 3%.

The US-based fungicide business of ISK, successfully integrated in the first half of the year, contributed \$211 million to sales. The acquisition was neutral on earnings per share after integration costs of \$30 million.

On a constant currency basis, sales grew by 3%; operating profit grew by 13%, reflecting changing product mix and control of expenses. Herbicide sales were 2% lower. Non-selective herbicides decreased by 3% due to the adverse effect of the Asian economic crisis, compounded by drought in South East Asia. *Touchdown* sales grew by 3%; excluding Asia Pacific where sales were lower, *Touchdown* sales increased by 18%. Sales of selective herbicides decreased by 1%, even though acreage of genetically modified crops increased significantly, particularly in the key US market.

Insecticide sales declined by 1%. Sales of *Karate* were essentially unchanged with growth in North America and Western European markets offset by lower sales in other regions. Sales of the corn rootworm insecticide, *Force*, grew by 31% with excellent growth in the US market.

Fungicide sales grew by 45%. *Amistar* has now been registered in 46 countries on 43 crops; outstanding success has been achieved with sales of \$294 million. The take-up in both Japan and France, the world's largest fungicide markets, has been excellent and matched the reception in other markets. In combination with *Bravo* acquired from ISK, *Amistar* will provide disease control across the broadest spectrum of crops.

Sales in North America increased by 6% with *Amistar* (sold as *Abound* in the US cereals sector), *Force*, *Achieve*, *Touchdown* and *Karate* contributing to growth. European sales increased by 9%, with *Amistar* contributing the highest growth rate, even though sales in East Europe were adversely affected by the downturn in CIS.

Due to adverse economic circumstances sales in Asia, Africa and Australasia fell by 15%.

Financial Review

Latin American sales grew by 6% with continued strong growth in all major territories except in Argentina where there were adverse market conditions.

The business continued to expand its biotechnology programme including the formation of research collaborations with the John Innes Centre and Sainsbury Laboratory, and Incyte Pharmaceuticals, Inc.

Specialties – 1998 compared with 1997

On a statutory basis, sales declined by 5% and operating profit grew by 4%.

On a constant currency basis, sales declined by 2%; operating profit grew by 21%.

In Industrial Colours continued sales growth in ink jet were partially offset by lower demand for pigments, mainly in Asia Pacific. Sales of Biocides were up 2% with volume growth coming from *Baquacil* for swimming pools and spas. LifeScience Molecules grew by 33% due to continued expansion of the pharmaceutical and agrochemical intermediates business.

Sales of Resins were flat. Stahl sales were 6% lower due to reduced demand in Asia.

Liquidity and Capital Resources

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

Cashflow

Net cash of \$4,699 million was generated from operations before exceptional items, compared to \$3,817 million in 1998. Net cash inflow before management of liquid resources was \$156 million, compared with an outflow of \$955 million in 1998. This improvement reflects the increased cash generation from operations and disposals together with lower acquisition costs offset by higher expenditure on intangible assets and exceptional costs. The 1999 cash flow from operations and disposals was applied mainly to taxation (\$1,020 million), capital expenditure and financial investment (\$2,731 million), exceptional items (\$1,586 million) and shareholder dividends

(\$1,216 million).

The cash flow performance has been complicated in 1999 by the proceeds from the disposal of Specialties (net \$1.6 billion inflow), exceptional items and Merck payments (\$2.2 billion outflow) and cash flows of discontinued activities.

Underlying cash flow, for ongoing operations, can be summarised as follows:

	\$bn
Trading cash flow	4.3
Capital expenditure	(1.5)
Interest	–
Tax paid	(0.8)
Net cash flow before distributions	2.0
Dividends	(1.2)
Share repurchase	(0.2)
Net cash flow	0.6

Net cash inflow from operating activities before exceptional items in 1998 amounted to \$3,817 million compared to \$3,463 million in 1997. The 1998 cash flow was applied mainly to taxation (\$775 million), shareholder dividends (\$995 million), net capital expenditure (\$1,369 million) and acquisitions (\$2,013 million). Other items contributed \$380 million, leaving a net cash deficit before management of liquid resources and financing of \$955 million.

Capitalisation

AstraZeneca had net funds of \$2,169 million at 31 December 1999, and gearing of nil (31 December 1998 – net funds \$2,254 million, gearing nil).

Undrawn committed bank facilities at 31 December 1999 totalled \$525 million with maturities ranging from 2001 through 2002. These facilities are used, in part, to support the group's US commercial paper programme. Uncommitted facilities and issues of commercial paper are used mainly to finance the group's seasonal working capital requirements.

RATIOS

As at end and for the year ended 31 December	1999	1998	1997
Return on shareholders' equity (%)	10.8	25.5	27.8
Equity/assets ratio (%)	52.0	59.1	59.6
Net funds/equity ratio (%)	21.1	20.6	30.1
Number of employees	58,000	58,300	53,800



826 million AstraZeneca shares were issued to Astra AB shareholders on merger and a further 3 million shares were issued in respect of share options. During the second half of the year the group began a share buy-back programme and re-purchased 4,338,444 shares before year end, bringing the number of shares in issue to 1,775,067,825 at year end. Group reserves were reduced by \$630 million due to the effect of exchange rate movements on translation of overseas assets and liabilities. Shareholders' funds reduced by a net \$627 million to \$10,302 million at year end.

Investments, Divestments and Capital Expenditure

There were no significant acquisitions in 1999. Net proceeds from acquisitions and disposals totalled \$1,978 million, the principal element being the disposal of Zeneca Specialties for \$1,956 million.

The group's net cash outflow on capital expenditure and financial investments during 1999 totalled \$2,731 million net of proceeds of disposals. Capital expenditure on tangible fixed assets is currently running at two times depreciation as investment in production capacity for growth phase and new products continues. This included new facilities for pharmaceuticals manufacturing and packing and investment in China for the manufacture of *Gramoxone*. Financial investments included the re-acquisition of certain marketing rights and the creation of a joint venture between Zeneca Agrochemicals and Japan Tobacco.

Year 2000

As anticipated, the sales patterns at the end of 1999 were not significantly impacted by Year 2000. AstraZeneca's operations were largely unaffected by date-related problems at the millennium rollover and normal business resumed, as planned, in January 2000 with only a small number of instances where contingency plans were invoked to resolve problems. Total spend on Year 2000 was \$170 million spread over more than three years and this expenditure ensured that material issues were avoided and business continuity was maintained.

EMU

Within Europe, economic and monetary union ('EMU') introduced a new currency, the euro, on 1 January 1999. On that date, 11 member states of the European Union – Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain – locked their exchange rates with the euro. Euro notes and currency are expected to come into circulation in January 2002 and national currencies will be withdrawn by 1 July of that year.

Neither the UK nor Sweden participated in EMU at the commencement of the third stage on 1 January 1999 and there are currently no agreements in place to do so. There can be no prediction as to whether the United Kingdom or Sweden will participate in EMU or as to the rate of exchange at which sterling and the Swedish kronor would be converted into euro.

US GAAP

AstraZeneca's Financial Statements have been prepared in accordance with UK GAAP which differs in certain significant respects from US GAAP. In particular, under US GAAP the merger has been accounted for as a purchase accounting acquisition of Astra by Zeneca. Accordingly the net assets of the group in accordance with US GAAP are significantly higher due to the goodwill arising of approximately \$14 billion and intangible assets of \$11 billion net of other adjustments of about \$3 billion. The 1999 results under US GAAP were impacted by one-off non-recurring charges in respect of in-process research and development expensed on acquisition of approximately \$3 billion and inventory step-ups of just under \$1 billion. In addition, Astra's results for the first quarter of the year of \$413 million are excluded under US GAAP; the 1998 full year comparative effect was \$1,427 million.

Further information is contained on pages 120 to 128 of the Financial Statements.

The net loss for the year ended 31 December 1999, under US GAAP was \$3,539 million compared with income of \$1,036 million in 1998. Corresponding figures under UK GAAP were profits of \$1,143 million and \$2,611 million, respectively. Adjustments to shareholders' equity under UK GAAP to a US GAAP basis amounted to a net increase of \$23,433 million in 1999 compared with a decrease of \$5,371 million in 1998 (driven principally by the exclusion of Astra's net assets of \$6,757 million).

New Accounting Standards

New UK or US applicable accounting standards which have been issued (both adopted and not yet adopted) are discussed on pages 62 and 122 respectively. The group has not yet evaluated the effects of new accounting standards which have been issued but not yet adopted; however they are not expected to have a material impact upon AstraZeneca's financial position and results of operation.

Financial Review

Treasury policy

AstraZeneca's treasury operations were co-ordinated on completion of the merger in April 1999 and have been based in London since August.

The main objective for the treasury operation within AstraZeneca is to support the group in building shareholder value by managing and controlling the group's financial risks. AstraZeneca's treasury operations are conducted centrally within the group in accordance with policies and procedures approved by the Board.

The treasury policy stipulates how treasury operations should manage the group's foreign exchange risk, interest rate risk, credit risk and funding risk.

Foreign exchange risk

Following completion of the merger the US dollar is considered the most significant currency for the group; as a consequence AstraZeneca has chosen to report its results in US dollars and manages its exposures against US dollars accordingly. The principal market risk is the exposure to movements in the exchange rates of currencies other than the US dollar, in particular sterling, the Swedish kronor and the euro. The principal exposures are net revenues in euro and yen and net costs in sterling and Swedish kronor as the majority of the group's manufacturing and research operations are in Sweden and the UK.

Currency exposure is managed centrally by group Treasury using 12 month currency cash flow forecasts for Swedish kronor, sterling, euro and Japanese yen, and monthly updated working capital forecasts for the major currencies reported by subsidiaries. Treasury uses derivative financial instruments, principally currency options and forward foreign exchange contracts, to hedge its currency exposure and it is group policy not to engage in any speculative transactions.

AstraZeneca hedges all of the transaction exposure on working capital balances, for a period of one to three months, using forward exchange contracts.

For the 12 month transaction exposure the benchmark is to hedge 50%, subject to variation within authorised limits, using a mixture of currency options and forward exchange contracts. The aim of the policy is to protect the downside risk by reducing short-term volatility risk.

Key controls applied to transactions in derivative financial instruments are to only use instruments where good market liquidity exists, to market re-value all financial instruments daily and to write options only to offset purchased options – ensuring that the group is not a net writer of options against any exposure.

Interest rate risk

The management of the group's liquid assets and loans are co-ordinated and controlled centrally by the group's treasury operations. AstraZeneca has significant positive cash flows and the liquidity of major subsidiaries is co-ordinated in cash pools and concentrated daily in London. Over 90% of the group's total net liquid funds are managed and controlled by group Treasury. Interest rate risk is managed according to a benchmark reflecting 90 days' duration of net liquid funds. The group's liquid funds are either invested directly in US dollars or, where invested in other currencies, are hedged back to the US dollar.

AstraZeneca's debt has an average maturity of 12 years, the majority is denominated in US dollars with a fixed rate of interest of around 7% or less.

Credit exposure

AstraZeneca's exposure to counterparty credit risk is controlled centrally by establishing and monitoring counterparty limits.

AstraZeneca trades in over 100 countries worldwide including trading in countries that are subject to political and economic uncertainty. This can give rise to exposure to sovereign risk and payment difficulties. AstraZeneca has a policy of reducing such exposure where possible through appropriate use of insurance, third party provided trade finance products or letters of credit.

Liquidity

The group has significant net funds to finance its ongoing working capital requirements for its operations. In addition, AstraZeneca also has guaranteed credit facilities in the amount of \$525 million and retains its commercial paper programme should the need arise for significant additional funding.

Sensitivity analysis

The analysis opposite summarises the sensitivity of the market value of AstraZeneca's financial instruments to hypothetical changes in market rates and prices. The range of changes chosen reflects AstraZeneca's view of changes which are reasonably possible over a one year period. Market values are the present value of future cash flows based on the market rates and prices at the valuation date.



31 DECEMBER 1999

	Market value change favourable/(unfavourable)				
	Market value	Interest rate		Exchange rate	
	31 December 1999	movement		movement	
	+1%	-1%	+10%	-10%	
	\$m	\$m	\$m	\$m	\$m
AstraZeneca					
Cash and short term investments	3,287	3	(3)	-	-
Long-term debt	(778)	39	(44)	5	(6)
Interest and currency swaps	14	-	-	9	(11)
Foreign exchange forwards	19	-	-	(26)	33
Foreign exchange options	35	-	-	(3)	54
		42	(47)	(15)	70

31 DECEMBER 1998

	Market value change favourable/(unfavourable)				
	Market value	Interest rate		Exchange rate	
	31 December 1998	movement		movement	
	+1%	-1%	+10%	-10%	
	\$m	\$m	\$m	\$m	\$m
Zeneca					
Long-term debt	(842)	51	(60)	73	(88)
Interest and currency swaps	7	-	-	7	(10)
Foreign exchange forwards	(8)	-	-	76	(96)
Foreign exchange options	42	-	-	98	(37)
Astra					
Cash and short term investments	2,796	7	(7)	361	(296)
Foreign exchange forwards	44	-	-	145	(145)

Interest rate risk

Market values for interest rate risk are calculated using a third party software model which models the present value of the instruments based on the market conditions at the valuation date. For long-term debt a favourable change in market value results in a decline in the absolute value of debt, for other financial instruments a favourable change in market value results in an increase in market value.

The sensitivity analysis assumes an instantaneous 100 basis point change in interest rates in all currencies from their levels at 31 December 1999, with all other variables held constant. Based on the composition of AstraZeneca's long-term debt portfolio as at 31 December 1999 (which is predominantly fixed rate), a 1% increase in interest rates would result in an additional \$1 million in interest incurred per year.

Foreign currency exchange rate risk

The 1999 AstraZeneca sensitivity analysis above assumes an instantaneous 10% change in foreign currency exchange rates from their levels at 31 December 1999, 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.

Comparative sensitivities against the US dollar for 31 December 1998 do not provide a meaningful comparative by which to assess changes in the group's risks and exposures as at that time AstraZeneca was two discrete groups (Zeneca Group PLC and Astra AB) with different local currencies. These groups monitored and hedged their exposures against sterling and Swedish kronor respectively rather than the US dollar. Therefore, for information purposes, the material sensitivities for the former Astra and Zeneca Groups as at 31 December 1998 are shown above.

The 1998 Astra and Zeneca sensitivity analyses above assume an instantaneous 10% change in foreign currency exchange rates from their levels at 31 December 1998, with all other variables held constant. In the case of Zeneca, the +10% case assumes a 10% strengthening of sterling against all other currencies and the -10% case assumes a 10% weakening of sterling and in the case of Astra, a +10% case assumes a 10% strengthening of the Swedish kronor against all other currencies and the -10% case assumes a 10% weakening of the Swedish kronor.

Board of Directors and Officers of the Company 1999

Percy Barnevik† (59) – Non-Executive Chairman – appointed as a Director 6 April 1999. Non-Executive Chairman of ABB Ltd, Investor AB and Sandvik AB. Non-Executive Director of General Motors Corporation.

Sir David Barnes‡ CBE (63) – Executive Deputy Chairman – appointed as a Director 15 February 1993. Non-Executive Director of Prudential Corporation Plc. Deputy Chairman of Business in the Community. Member of the Board of Trustees of the British Red Cross. Non-Executive Chairman of Imperial Cancer Research Technology Ltd.

Håkan Mogren‡ (56) – Executive Deputy Chairman – appointed as a Director 6 April 1999. Formerly CEO and a Director of Astra AB (appointed 18 May 1988). Chairman of the Research Institute of Industrial Economics (IUI). Non-Executive Director of Gambro AB, Investor AB, the Federation of Swedish Industries and the Marianne and Marcus Wallenberg Foundation. Member of the Royal Swedish Academy of Engineering Sciences.

Tom McKillop (56) – Chief Executive – appointed as a Director 1 January 1996. Non-Executive Director of Nycomed Amersham plc and Lloyds TSB Group Plc.

Sir Peter Bonfield* CBE, FEng (55) – Non-Executive Director – appointed as a Director 1 January 1995. Chief Executive of British Telecommunications plc. Non-Executive Director of ICL plc and Vice-President of The British Quality Foundation.

Erna Möller* (59) – Non-Executive Director – appointed as a Director 6 April 1999. Formerly a Director of Astra AB (appointed 15 May 1995). Professor of Clinical Immunology and Member of the Nobel Assembly, Karolinska Institute.

Dame Bridget Ogilvie# (61) – Non-Executive Director – appointed as a Director 1 January 1997. Non-Executive Director of Lloyds TSB Group Plc and the Manchester Technology Fund Limited. Chairman, Medicines for Malaria Venture, World Health Organisation and the Committee on the Public Understanding of Science (COPUS).

Michael Pragnell (53) – Executive Director and Chief Executive Officer of Zeneca Agrochemicals – appointed as a Director 1 January 1997. Has overall responsibility for Zeneca Agrochemicals. Non-Executive Director of David S Smith (Holdings) PLC.

Lars Ramqvist* (62) – Non-Executive Director and Chairman of the Remuneration Committee – appointed as a Director 6 April 1999. Formerly a Director of Astra AB (appointed 17 May 1994). Chairman of Telefonaktiebolaget LM Ericsson, Volvo AB and Skandia Insurance Company Ltd. Non-Executive Director of Svenska Cellulosaaktiebolaget (SCA).

Åke Stavling (55) – Executive Director, Business Development and Integration – appointed as a Director 6 April 1999. Also has responsibility for corporate strategy.

Jonathan Symonds (40) – Executive Director and Chief Financial Officer – appointed as a Director 1 October 1997. Also has overall responsibility for information services, insurance and investor relations.

Karl von der Heyden# (63) – Non-Executive Director and Chairman of the Audit Committee – appointed as a Director 1 October 1998. Executive Vice-Chairman of PepsiCo, Inc. Non-Executive Director of Federated Department Stores Inc., the Pepsi Bottling Group and the Whitman Corporation.

Marcus Wallenberg# (43) – Non-Executive Director – appointed as a Director 6 April 1999. Appointed as a Director of Astra AB 18 May 1989. President and Chief Executive Officer of Investor AB. Non-Executive Vice-Chairman of Saab AB and Telefonaktiebolaget LM Ericsson. Non-Executive Director of Scania AB, Skandinaviska Enskilda Banken, Stora Enso Oyj, the Knut and Alice Wallenberg Foundation and SAS Representatives.

Claes Wilhelmsson (60) – Executive Director, Research and Development – appointed as a Director 6 April 1999.

Sir Sydney Lipworth QC – Chairman – retired 6 April 1999.
Peter Doyle CBE – Executive Director – retired 6 April 1999.
Sir Richard Greenbury – Non-Executive Director and Chairman of the Remuneration and Nomination Committee – retired 6 April 1999.

Frank Meysman – Non-Executive Director – retired 6 April 1999.

Sir Jeremy Morse KCMG – Non-Executive Director and Chairman of the Audit Committee – retired 6 April 1999.

Alan Pink – Executive Director – retired 6 April 1999.

Other Officers of the Company at 31 December 1999 included members of the Senior Executive Team, as set out on pages 49 to 50, and:

Graeme Musker – Group Secretary and Solicitor – appointed as Company Secretary 6 June 1993.

† Member of the Nomination Committee

* Member of the Remuneration Committee

Member of the Audit Committee



The Board in 1999

Details of the Board appear on page 48. Following completion of the merger on 6 April 1999, Sir Sydney Lipworth QC, Peter Doyle CBE, Sir Richard Greenbury, Frank Meysman, Sir Jeremy Morse KCMG and Alan Pink retired from office. On the same date, Håkan Mogren, Åke Stavling and Claes Wilhelmsson were appointed Executive Directors and Percy Barnevik, Erna Möller, Lars Ramqvist and Marcus Wallenberg were appointed Non-Executive Directors.

Percy Barnevik was appointed Non-Executive Chairman of the Company. Håkan Mogren, Marcus Wallenberg, Erna Möller and Lars Ramqvist were previously members of the Board of Directors of Astra AB, Håkan Mogren being President and CEO and Marcus Wallenberg being Vice-Chairman of the Board. Following completion of the merger, all of those individuals except Marcus Wallenberg ceased to be Directors of Astra AB and all became Directors of the Company. Håkan Mogren also ceased to be President and CEO of Astra AB and Sir David Barnes CBE ceased to be Chief Executive of the Company; each was appointed Executive Deputy Chairman of the Company. Tom McKillop became Chief Executive of the Company with effect from the same date.

Åke Stavling and Claes Wilhelmsson were previously members of Astra AB's senior executive management team, Åke Stavling having overall responsibility for finance and control matters and Claes Wilhelmsson for research and development.

On completion of the merger, the retiring Directors of Astra AB (now called AstraZeneca AB) were Bo Berggren (Chairman of the Board), Charles L. Cooney, Claes Dahlbäck, James M. Denny, Harry Faulkner, Lars H. Thunell, Katarina Byström and Sven-Åke Pavasson-Hatta.

Re-election of Directors

All of the Directors retire under Article 90 of the Articles of Association and are presenting themselves for re-election at the AGM on 26 May 2000. All of the Directors are recommended for re-election.

Principal Activities

The Company is the holding company for a group of subsidiaries whose principal activities are described in the Operational and Financial Reviews, which are incorporated in this report by reference. Principal subsidiaries, joint ventures and associates and their locations are given on pages 118 and 119.

Dividends

The dividend for 1999 of \$0.70 per Ordinary Share amounts to \$1,242 million.

Corporate Governance

Completion of the merger in 1999 provided an opportunity to reconsider and redesign a number of the Company's corporate governance structures while integrating the former Astra and former Zeneca businesses, building on the best practices of the two predecessor organisations. Comments below in respect of corporate governance matters should be read in this context.

Throughout 1999, other than as set out in this report, the Company has applied all of the principles of good governance contained in Section 1 of the Combined Code published by the Hampel Committee on Corporate Governance and approved by the London Stock Exchange.

Other than as set out in this report, the Company has also complied throughout the accounting period with the Code provisions set out in Section 1 of the Combined Code.

Directors and Organisation

The Board is responsible for the Company's objectives, policies and stewardship of the Company's resources. In 1999, it met 12 times; seven Board meetings are planned for 2000. It concentrates mainly on strategy, financial performance and critical business issues. Executive Directors have specific remits and areas of responsibility which are shown on page 48. The differing roles of Executive Directors and Non-Executive Directors are clearly delineated; both have fiduciary duties towards shareholders. However, Executive Directors have direct responsibility for business operations whereas the Non-Executive Directors have a responsibility to bring independent, objective judgement to bear on Board decisions. There is an established and transparent procedure for appointments of new directors to the Board which is operated by the Nomination Committee. All of the Directors retire at each AGM and may offer themselves for re-election by shareholders.

The Chief Executive, Tom McKillop, has delegated authority from, and is responsible to, the Board for directing and promoting the profitable operation and development of the Company consistent with the primary aim of enhancing long term shareholder value. He is obliged to refer certain major matters (defined in the formal delegation of the Board's authority) back to the Board.

The Chief Executive has established and chairs the Senior Executive Team. While retaining full responsibility for the authority delegated to him by the Board, the Senior Executive Team is the vehicle through which he exercises that authority in respect of the Company's pharmaceuticals and healthcare businesses (including Salick Health Care, Astra Tech and Diagnostics). The other members of the Senior Executive Team are Åke Stavling, Jonathan Symonds, Claes Wilhelmsson

Directors' Report

(all Executive Directors); Michael O'Brien, Executive Vice-President, International Sales and Marketing; Carl-Gustaf Johansson, Executive Vice-President, North America and President and CEO, AstraZeneca LP; John Patterson, Executive Vice-President, Product Strategy and Licensing; Barrie Thorpe, Executive Vice-President, Operations and Gunnar Christiani, Executive Vice-President, Human Resources. During 1999, it normally met twice a month to review all business issues and decisions other than those considered to be of a size or importance to require the attention of, or which are reserved to, the full Board. In 2000, the Senior Executive Team will normally meet once a month for two days.

The Chief Executive has established and chairs the Agrochemicals Executive Team which is the vehicle through which he exercises the authority delegated to him by the Board in respect of Zeneca Agrochemicals. Its other members comprise Michael Pragnell, Åke Stavling and Jonathan Symonds (all Executive Directors) and it meets approximately four times per annum.

The Chief Executive, acting through the Senior Executive Team and the Agrochemicals Executive Team, is responsible to the Board for the management and performance of the Company's businesses within the framework of Company policies, reserved powers and routine reporting requirements. The roles of the Board, the Chairman, the Deputy Chairmen, the Chief Executive, the Senior Executive Team, the Agrochemicals Executive Team and their key committees are documented, as are the Company's delegated authorities and reserved powers, the means of operation of the business and the roles of corporate functions.

Directors' Remuneration

Details of the Directors' remuneration are contained in the Report of the Board on Remuneration on pages 52 to 54.

Relations with Shareholders

The Company has frequent discussions with institutional shareholders on a range of issues affecting its performance. These comprise meetings following the announcement of the annual results with the Company's largest institutional shareholders, on an individual basis; and on a group basis, up to two business strategy briefings relating to individual businesses during the year. In addition the Company responds continually to individual ad hoc requests for discussions from institutional shareholders.

All shareholders, including private investors, have an opportunity to participate in discussions with the Board on matters relating to the Company's operation and performance at the AGM.

Accountability and Audit

In its financial reporting to shareholders and other interested parties by means of annual and quarterly performance reports, the Board aims to present a balanced and understandable assessment of the Company's financial position and prospects.

The key features of the Company's current system of internal control are described below.

The Board has overall responsibility for the Company's system of internal control which aims to safeguard shareholders' investments and the Company's assets, ensure that proper accounting records are maintained and that the financial information used within the business and for publication is reliable. The system is also designed to provide reasonable assurance of effective operations and compliance with laws and regulations, but any system of internal control can only provide reasonable, not absolute, assurance against material misstatement or loss.

The Company has in place a range of procedures to monitor and control the risks associated with the achievement of its objectives. The Company's businesses are subject to annual strategy reviews, to an annual budget process including forecasts for the next three years together with a sensitivity and risk analysis, to quarterly updates of the forecast for the current year and to monthly reporting and explanation of actual performance and variances. During 2000, the performance measures will move away from being predominantly financial towards a broader range of measures that address the achievement of key business priorities. All material capital investments must be submitted for approval with supporting information which includes a requirement to identify and discuss risks and alternatives. Treasury operations are centralised, operate within defined limits and are subject to regular reporting requirements.

Following completion of the merger on 6 April 1999, a formal review of a number of the Company's corporate policies was initiated. As is the case with several of the policies, the review of the Company's code of ethics is ongoing. Pending its completion, the Zeneca Group Code of Ethics remains valid and states that it is the policy of the Company that all of its subsidiaries and their employees observe high standards of integrity and act with due skill, care, diligence and fairness in the conduct of business. The Company's management recognises that such standards make a significant contribution to the overall control environment and seek, by their words and actions, to reinforce them throughout the business.

The Company's Audit Committee has received and considered reports on the effectiveness of the Company's system of internal financial control. These include an annual assessment of internal financial control from the internal audit function,



reports from the external auditors on matters identified in the course of their statutory audit work and management assurance of the maintenance of control. The latter is based on an annual 'letter of assurance' by which responsible managers confirm the adequacy of their systems of internal financial control, their compliance with Company policies, local laws and regulations and report any control weaknesses identified in the past year.

Following 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 Combined Code', the Directors initiated a formal review of the effectiveness of the group's system of non-financial controls, including operational and compliance controls and risk management.

As a result of this review and the completion of the merger, work to develop and refine the Company's business risk management processes and internal controls is ongoing. Significant progress has already been made, building on the extensive range of internal control and risk management activities which both Astra and Zeneca undertook as embedded business processes prior to the merger. In particular, a comprehensive review of the Company's high level internal control arrangements has been undertaken which has confirmed the global adequacy of this framework. The principal risks facing the Company have been identified by the Senior Executive Team, mechanisms for the co-ordinated management of those risks are being developed and minor changes are being planned in the way in which ongoing communication to the Board of the operation of control and risk processes takes place.

The Directors are confident that an effective embedded system of internal control has been and will be maintained throughout this process, and that implementation of the Turnbull guidance will be completed during 2000.

Non-compliance with the Combined Code

The items in the Combined Code with which the Company did not comply in full throughout the period are the appointment of a senior Non-Executive Director, membership of the Nomination Committee and service contracts' notice periods. The reasons for non-compliance are stated below.

To date, members of the Board have not considered that the appointment of a senior Non-Executive Director would enhance the manner in which they discharge their duties.

The members of the Company's Nomination Committee are Percy Barnevik (Chairman of the Committee), Sir David Barnes CBE, Håkan Mogren and one Non-Executive Director nominated by the Chairman of the Committee. The Board believes

that, while not strictly complying with the provision of the Combined Code that a majority of the members of the Committee should be Non-Executive Directors, this membership provides a forum with exceptional experience of the Company's requirements and the knowledge of former Astra and Zeneca personnel that is necessary for the consideration of new Board appointments.

The service contracts of Executive Directors provide for a notice period of two years. In the case of a number of Directors who were formerly employed by Astra, this has involved a reduction in the notice period to which they were previously entitled. It is not currently proposed that notice periods should be reduced further for existing service contracts. However, for new Executive Directors, although the initial notice period may be for a longer period, it is the Board's intention that it should be reduced to one year subsequently. The Board recognises that market conditions may not make this easy to achieve in the near term and the Board has retained the flexibility to offer whatever is necessary to make appropriate new appointments.

Going Concern

The Directors have a reasonable expectation that the Company and its subsidiaries have adequate resources to continue in operational existence for the foreseeable future and therefore continue to adopt the going concern basis in preparing the accounts.

Auditors

A resolution will be proposed at the AGM on 26 May 2000 for the re-appointment of KPMG Audit Plc, London as auditor of the Company. Since the completion of the merger on 6 April 1999, KPMG Audit Plc, London and Deloitte & Touche, London have been the Company's joint auditors. Prior to that date, KPMG Audit Plc, London was the auditor of the Company.

Purchase of Own Shares

At the AGM, the Company will be seeking a renewal of its current permission from shareholders to purchase its own shares.

In its half year results announcement for 1999, the Company stated that its distribution policy would contain both a regular dividend cash flow and a share repurchase component to give the Company more flexibility in managing its capital structure over time. During 1999, in line with this policy, the Company purchased for cancellation 4,338,444 of its own Ordinary Shares with a nominal value of \$0.25 each for an aggregate sum of \$183 million. This number of shares represents 0.24% of the Company's total issued share capital.

Directors' Report

Allotments

Changes in the Company's Ordinary Share capital during the year, including allotments of shares under the Company's share schemes, are given in Note 40 to the Financial Statements.

Charitable Contributions

The Company and its subsidiaries contributed \$20 million to charity in 1999. This includes a donation of \$16 million made to the AstraZeneca Science Teaching Trust.

Political Contributions

No political contributions in respect of which the Company is required to make any statements in this report were made in 1999.

Payment of Suppliers

Although 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 Company policy to agree appropriate payment terms with all suppliers when agreeing the terms of each transaction, 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 owed by the Company's subsidiaries to trade creditors at the balance sheet date was equivalent to 50 days' average purchases. No equivalent disclosure is provided in respect of the Company as it has no external creditors.

Employee Involvement

The Company maintains an open management style and involves its employees both in daily decisions and longer term matters. It is fully committed to keeping all of its employees informed about their work unit and the wider business, as well as discussing the implications of major business changes and other relevant matters. In line with legal requirements and cultural standards, more formal national and business level employee consultation arrangements exist in some countries. A forum for employee consultation at European level, chaired by the Chief Executive, was introduced in 1995. Details of employees' share schemes appear in Note 33 to the Financial Statements.

Equal Opportunities

The Company believes that every employee should be treated with the same respect and dignity. It values the rich diversity and creative potential of people with differing backgrounds and abilities, and encourages a culture of equal opportunities in which personal success depends on personal merit and performance. It is Company policy that there should be no discrimination against any person for any reason that is not relevant to the effective performance of their job. All judgements about people for the purposes of recruitment,

development and promotion will be made solely on the basis of their ability and potential in relation to the needs of the job. Every manager is responsible for implementing this policy.

Employment of People with Disabilities

It is Company policy that people with disabilities should have the same consideration as others with respect to recruitment, retention and personal development. Depending on their skills and abilities, they enjoy the same career prospects as other employees and the same scope for realising potential. The Company also takes all reasonable steps to ensure that its working environments can accommodate special needs.

Report of the Board on Remuneration of Directors

Establishment of Separate Remuneration and Nomination Committees

Following the completion of the merger on 6 April 1999, the Remuneration and Nomination Committee was divided into two separate committees. Prior to that, the members of the Remuneration and Nomination Committee were Sir Richard Greenbury (Chairman of the Committee), Sir Peter Bonfield CBE, FREng, Sir Jeremy Morse KCMG, Frank Meysman, Dame Bridget Ogilvie and Karl von der Heyden.

Membership and Remit of the Nomination Committee

The members of the Nomination Committee during 1999 were Percy Barnevik (Chairman of the Committee), Sir David Barnes CBE, Håkan Mogren and one Non-Executive Director to be nominated by Percy Barnevik.

The remit of the Committee is, primarily, to make proposals to the Board for any new appointments as Directors of the Company.

Membership and Remit of the Remuneration Committee

The members of the Remuneration Committee during 1999 were Lars Ramqvist (Chairman of the Committee), Erna Moller and Sir Peter Bonfield CBE, FREng. They are all Non-Executive Directors of the Company, independent and have no personal financial interest in matters to be decided, no potential conflicts of interest arising from cross-directorships and no day-to-day involvement in running the Company.

The remit of the Committee is, among other things, to recommend to the Board the fundamental remuneration policy for the Company and to ensure the proper operation of all schemes involving the Company's shares. More particularly, it makes specific proposals in respect of the remuneration packages of individual Executive Directors and the Company's most senior executives.



The Company is committed to developing a dynamic performance culture in which every employee champions the growth of shareholder value; they will be clear about the Company's objectives, know how their work impacts on them and that they will benefit from achieving high levels of performance.

With this vision in mind, the Remuneration Committee has reviewed remuneration policy. The Board has confirmed that the overall policy and purpose should be to:

- n attract and retain people of the quality necessary to sustain the Company as one of the best pharmaceuticals companies in the world; and
- n motivate them to achieve the level of performance necessary to create sustained growth in shareholder value.

In order to achieve this, remuneration policy and practice will be designed to:

- n closely align individual and team reward with business performance at each level;
- n encourage employees to perform to their fullest capacity;
- n encourage employees to align their interests with those of shareholders;
- n support managers' responsibility to achieve business performance through people, and for them to recognise superior performance, in the short and longer term;
- n be as locally focused and flexible as realistic;
- n be competitive and cost effective in each of the relevant employment markets; and
- n be as internally consistent as realistic taking due account of market need.

Components of the Remuneration Package

The cost and value of the components of the remuneration package will be considered as a whole and designed:

- n to ensure a proper balance of fixed and variable performance related components, linked to short and long term objectives; and
- n to reflect market competitiveness taking account of the total value of all of the components.

The components contained in the total remuneration package should be:

- n annual salary – based on conditions in the relevant geographic market, with the provision to recognise, in addition, the value of individuals' sustained personal performance, resulting from their ability and experience;
- n ad hoc rewards – special payments and other measures available to reward individuals and teams following a particular and outstanding business contribution;
- n short term bonus – a lump sum payment related to the targeted achievement of identified business drivers and, where appropriate, personal performance goals, measured over a year within a specific scheme;
- n longer term bonus – a measure of reward (cash, shares or share options) related to the targeted growth in shareholder return over the longer term (three years or longer);
- n share participation – various schemes to provide the opportunity for all employees to take a personal stake in the Company's wealth as shareholders; and
- n other benefits – benefits such as holidays, sickness benefit and pensions which are cost effective and compatible with the relevant national welfare arrangements.

The way in which these elements are combined and applied will vary depending, for example, on market need and practice in various countries.

For Executive Directors, the individual components are:

- n annual salary – the actual salary for each of the Executive Directors is determined on behalf of the Board by the Remuneration Committee; these salaries reflect the experience and sustained performance of the individuals to whom they apply, as judged annually by the Committee, taking account also of market competitiveness;
- n short term bonus – in respect of 1999, (apart from transitional arrangements applicable to Executive Directors who were formerly employees of Astra AB for the period prior to the merger), Executive Directors were entitled to an annual bonus calculated on the performance of the Company as measured against targets agreed with the Remuneration Committee for the year; for Directors, the annual bonus is calculated on a scale of 0-50% of salary; 25% of salary is payable for the achievement of target business performance; the Committee may apply an

Directors' Report

individual multiplier of 0-1.5 to the bonus on a discretionary and exceptional basis to reward or reflect individual performance; 50% of the bonus payable must be taken in Ordinary Shares in the Company and the remainder in cash or shares at the option of the individual Director; bonus taken in shares is normally matched by an equivalent number of shares by the Company; shares are awarded through an employee benefits trust, by way of a conditional appropriation, and are released to the Director upon satisfaction of the condition which, subject to exceptions, is that the Director must remain employed by the Company for three years after the appropriation; shares are otherwise forfeited; no dividends are payable prior to release;

- n longer term bonus – Directors are also rewarded for improvement in the share price performance of the Company sustained over a period of years by the grant of share options; share options are granted incrementally to the equivalent face value of four times each Director's salary; the exercise of options granted under the Zeneca 1994 Executive Share Option Scheme is currently subject to the performance condition that before any exercise, earnings per share must grow by at least the increase in the UK retail prices index plus 3% per annum over a continuous three year period following grant; there has been a policy, subject to the discretion of the Remuneration Committee, of phasing the grant of replacement options following any exercise; and
- n pension and other benefits – normally, UK Directors participate in the Zeneca contributory pension scheme and are members of the Zeneca pension fund which provides a pension of up to two-thirds of basic salary on retirement at age 62 with at least 20 years' service; the scheme also provides for dependants' pensions and lump sums on death in service.

In respect of those UK Directors, namely Michael Pragnell and Jonathan Symonds, whose pensionable earnings are capped by the earnings limit imposed by the Finance Act 1989, money purchase funded unapproved retirement benefit schemes are available. The Company has agreed to pay 50% of basic salary in excess of the earnings limit with the intention of providing equivalence of benefits with non-capped UK Directors. If this does not provide equivalence, then the Company has agreed to make up the difference.

Normally, Swedish Directors participate in the collectively bargained ITP pension plan, which provides pensions, dependants' pensions and lump sums on death in service.

In respect of those Swedish Directors, namely Håkan Mogren, Åke Stavling and Claes Wilhelmsson, whose pensionable earnings are in excess of the earnings limit imposed by the

Communal Tax Law (Kommunalskattelagen), supplementary pension commitments are made. The Company has agreed to pay 70% of pensionable salary from age 60 to age 65 and 50% of such earnings from age 65. The ITP provisions are included in this additional promise.

Note 35 to the Financial Statements sets out the information required by the Listing Rules of the London Stock Exchange relating to Directors' pension entitlements.

Other customary benefits (such as car and fuel, health benefits, savings related share option scheme) are made available as required.

From 2000 there will be a new annual bonus scheme related to the achievement of both the targeted performance of earnings per share and the achievement of individual measures relevant to each Director's particular area of responsibility. The bonus payable will be on a scale of 0-100% of salary; 50% of salary will be payable for the achievement of target business performance. 80% of the bonus will relate to the achievement of the earnings per share target.

It is proposed that a new executive share option scheme will be put to the AGM on 26 May 2000 for approval and full details of this will be sent to shareholders with the Notice of AGM.

Emoluments in 1999: the emoluments of Directors of the Company are set out in Note 35 to the Financial Statements.

Full details of Directors' interests in Ordinary Shares of the Company and its subsidiaries (including options), together with options granted and exercised in 1999 are set out in Note 34 to the Financial Statements.

Service Contracts

Each Executive Director normally has a service contract with a notice period of two years subject to retirement, normally, at the age of 62. At the time of the AGM on 26 May 2000, the unexpired term of Executive Directors' service contracts will be a maximum of 24 months.

External Appointments

With the specific approval of the Board in each case, Executive Directors may accept external appointments as non-executive directors of other companies and retain any related fees paid to them.

On behalf of the Board

G H R Musker

Group Secretary and Solicitor

23 February 2000



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Directors' responsibilities in respect of the preparation of the financial statements

The Directors are required by United Kingdom company law to prepare for each accounting period financial statements which give a true and fair view of the state of affairs of the group and the Company as at the end of the accounting period and of the profit or loss for that period. In preparing the financial statements the Directors are required to select and apply consistently suitable accounting policies and make reasonable and prudent judgements and estimates. Applicable accounting standards also have to be followed and a statement made to that effect in the financial statements, subject to any material departures being disclosed and explained in the notes to the financial statements. The Directors are required to prepare the financial statements on a going concern basis unless it is inappropriate to presume that the group will continue in business. The Directors are responsible for ensuring proper accounting records are kept which disclose with reasonable accuracy at any time the financial position of the Company and to enable them to ensure that the financial statements comply with the Companies Act 1985. They are also responsible for taking reasonable steps to safeguard the assets of the Company and for taking reasonable steps for the prevention and detection of fraud and other irregularities.



Auditors' report to the members of AstraZeneca PLC

We have audited the financial statements on pages 58 to 128.

Respective responsibilities of Directors and Auditors

The Directors are responsible for preparing the Annual Report and Form 20-F. As described on page 56 this includes responsibility for preparing the financial statements in accordance with applicable United Kingdom law and accounting standards; the Directors have also presented additional information under United States requirements. Our responsibilities, as independent auditors, are established in the United Kingdom by statute, the Auditing Practices Board, the Listing Rules of the London Stock Exchange, and by our profession's ethical guidance.

We report to you our opinion as to whether the financial statements give a true and fair view and are properly prepared in accordance with the Companies Act 1985. We also report to you if, in our opinion, the Directors' Report is not consistent with the financial statements, if 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 or the Listing Rules regarding Directors' remuneration and transactions with the group is not disclosed.

We review whether the statement on page 49 reflects the Company's compliance with those provisions in the Combined Code specified for our review by the Stock Exchange, 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 Company's corporate governance procedures or its risk and control procedures.

We read the other information contained in the Annual Report and Form 20-F, including the corporate governance statement, and consider whether it is consistent with the audited financial statements. We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the financial statements.

Basis of audit opinion

We conducted our audit in accordance with auditing standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgements made by the Directors in the preparation of the 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 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 financial statements.

Opinion

In our opinion the financial statements give a true and fair view of the state of affairs of the Company and the group as at 31 December 1999 and of the profit of the group for the year then ended and have been properly prepared in accordance with the Companies Act 1985.

Generally accepted accounting principles in the United Kingdom vary in certain significant respects from generally accepted accounting principles in the United States. Application of generally accepted accounting principles in the United States would have affected results of operations for each of the years in the three-year period ended 31 December 1999 and consolidated Shareholders' equity at 31 December 1999 and 1998, to the extent summarised on pages 120 to 128.

23 February 2000

KPMG Audit Plc
Chartered Accountants
Registered Auditor
8 Salisbury Square
London EC4Y 8BB

Deloitte & Touche
Chartered Accountants
Registered Auditor
1 Little New Street
London EC4A 3TR

The above opinion is provided in compliance with UK requirements. An opinion complying with auditing standards generally accepted in the United States will be included in the Annual Report and Form 20-F filed with the United States Securities & Exchange Commission.

Financial Statements

Group Profit and Loss Account

For the year ended 31 December

1999

	Notes	Continuing operations				Total \$m
		Ongoing operations \$m	Operations to be discontinued \$m	Exceptional items \$m	Discontinued operations \$m	
Turnover: Group and share of joint ventures'		15,334	2,657	-	662	18,653
Less: Share of joint ventures' turnover		(200)	-	-	(8)	(208)
Group turnover	2	15,134	2,657	-	654	18,445
Operating costs	2	(11,704)	(2,436)	(1,162)	(586)	(15,888)
Other operating income	2	140	46	-	3	189
Group operating profit	2	3,570	267	(1,162)	71	2,746
Share of operating (loss)/profit of joint ventures and associates	3	(10)	2	-	1	(7)
Profits less losses on sale and closure of operations	5	-	-	-	237	237
Merger costs	5	-	-	(1,013)	-	(1,013)
Profits on sale of fixed assets	5	-	-	-	-	-
Profit on ordinary activities before interest		3,560	269	(2,175)	309	1,963
Net interest	6	(4)	-	-	-	(4)
Profit on ordinary activities before taxation		3,556	269	(2,175)	309	1,959
Taxation	7	(1,048)	(93)	448	(122)	(815)
Profit on ordinary activities after taxation		2,508	176	(1,727)	187	1,144
Attributable to minorities		-	(1)	-	-	(1)
Net profit for the financial year		2,508	175	(1,727)	187	1,143
Dividends to Shareholders	8					(1,242)
Profit/(loss) retained for the financial year						(99)
Earnings per \$0.25 Ordinary Share before exceptional items	9	\$1.41	\$0.10	-	\$0.03	\$1.54
Earnings per \$0.25 Ordinary Share (basic)	9	\$1.41	\$0.10	(\$0.97)	\$0.10	\$0.64
Earnings per \$0.25 Ordinary Share (diluted)	9	\$1.41	\$0.10	(\$0.97)	\$0.10	\$0.64
Weighted average number of Ordinary Shares in issue (millions)	9					1,776

Group Statement of Total Recognised Gains and Losses

For the year ended 31 December

1999

	Notes	\$m
Net profit for the financial year		1,143
Movement in unrealised holding gains and losses on short-term investments	22	-
Exchange adjustments on net assets	22	(740)
Translation differences on foreign currency borrowings	22	132
Tax on translation differences on foreign currency borrowings	22	(22)
Total recognised gains and losses relating to the financial year		513

\$m means millions of US dollars

Financial Statements



Continuing operations					1998
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total	
\$m	\$m	\$m	\$m	\$m	\$m
12,383	2,790	-	1,309	16,482	
(1,065)	-	-	(15)	(1,080)	
11,318	2,790	-	1,294	15,402	
(8,891)	(2,492)	(72)	(1,158)	(12,613)	
119	61	163	10	353	
2,546	359	91	146	3,142	
534	1	-	4	539	
-	-	-	(46)	(46)	
-	-	-	-	-	
-	-	17	-	17	
3,080	360	108	104	3,652	
47	-	-	-	47	
3,127	360	108	104	3,699	
(903)	(126)	(16)	(41)	(1,086)	
2,224	234	92	63	2,613	
(3)	1	-	-	(2)	
2,221	235	92	63	2,611	
				(1,061)	
				1,550	
\$1.25	\$0.13	-	\$0.06	\$1.44	
\$1.25	\$0.13	\$0.05	\$0.04	\$1.47	
\$1.24	\$0.13	\$0.05	\$0.04	\$1.46	
				1,779	

Continuing operations					1997
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total	
\$m	\$m	\$m	\$m	\$m	\$m
10,600	2,605	-	1,369	14,574	
(1,398)	-	-	(10)	(1,408)	
9,202	2,605	-	1,359	13,166	
(6,912)	(2,301)	-	(1,222)	(10,435)	
60	61	-	5	126	
2,350	365	-	142	2,857	
717	2	-	3	722	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-	
3,067	367	-	145	3,579	
81	-	-	-	81	
3,148	367	-	145	3,660	
(899)	(131)	-	(51)	(1,081)	
2,249	236	-	94	2,579	
(8)	(1)	-	-	(9)	
2,241	235	-	94	2,570	
				(986)	
				1,584	
\$1.27	\$0.13	-	\$0.05	\$1.45	
\$1.27	\$0.13	-	\$0.05	\$1.45	
\$1.26	\$0.13	-	\$0.05	\$1.44	
				1,777	

1998
\$m
2,611
2
(178)
(7)
2
2,430

1997
\$m
2,570
1
(766)
(5)
2
1,802

Financial Statements

Group Balance Sheet

At 31 December

	Notes	1999 \$m	1998 \$m
Fixed assets			
Tangible fixed assets	11	5,981	6,281
Goodwill and intangible assets	12	3,736	2,440
Fixed asset investments			
Investments in joint ventures	13	108	157
Investments in associates	13	6	5
Other investments	13	71	191
		9,902	9,074
Current assets			
Stocks	14	2,156	2,029
Debtors	15	4,470	3,963
Short-term investments	16	2,859	2,702
Cash		429	710
		9,914	9,404
Total assets		19,816	18,478
Creditors due within one year			
Short-term borrowings	17	(344)	(347)
Current instalments of loans	19	(34)	(30)
Finance leases		(1)	(5)
Other creditors	18	(6,640)	(5,268)
		(7,019)	(5,650)
Net current assets		2,895	3,754
Total assets less current liabilities		12,797	12,828
Creditors due after more than one year			
Loans	19	(739)	(761)
Finance leases		(1)	(15)
Other creditors	18	(462)	(25)
		(1,202)	(801)
Provisions for liabilities and charges	21	(1,253)	(1,045)
Net assets		10,342	10,982
Capital and reserves			
Called-up share capital	40	444	600
Share premium account	23	202	54
Capital redemption reserve	23	1	–
Merger reserve	23	441	583
Other reserves	23	676	44
Profit and loss account	23	8,538	9,648
Shareholders' funds – equity interests	22	10,302	10,929
Minority equity interests		40	53
Shareholders' funds and minority interests		10,342	10,982

The financial statements on pages 58 to 128 were approved by the Board of Directors on 23 February 2000 and were signed on its behalf by:

Tom McKillop
Director

Jonathan Symonds
Director



Statement of Group Cash Flow

For the year ended 31 December

		1999	1998	1997
	Notes	\$m	\$m	\$m
Cash flow from operating activities				
Net cash inflow from trading operations	24	4,699	3,817	3,463
(Outflow)/inflow related to exceptional items	25	(1,586)	15	(108)
Net cash inflow from operating activities		3,113	3,832	3,355
Dividends received from joint ventures and associates				
Joint ventures		3	262	369
Returns on investments and servicing of finance				
Interest received		132	229	188
Interest paid		(97)	(124)	(145)
Dividends paid by subsidiaries to minority interests		(6)	(2)	(74)
		29	103	(31)
Tax paid		(1,020)	(775)	(750)
Capital expenditure and financial investment				
Cash expenditure on tangible fixed assets	11	(1,490)	(1,392)	(1,233)
Cash expenditure on intangible assets		(1,263)	(114)	(100)
New fixed asset investments		(6)	(18)	(11)
Disposals of fixed assets		28	155	52
		(2,731)	(1,369)	(1,292)
Acquisitions and disposals				
Acquisitions and purchases of minority interest	26	(23)	(2,013)	(321)
Investments in joint ventures and associates		-	-	(5)
Disposals of business operations	27	1,981	-	3
Disposals of investments in associates		20	-	2
		1,978	(2,013)	(321)
Equity dividends paid to Shareholders		(1,216)	(995)	(882)
Net cash inflow/(outflow) before management of liquid resources and financing	29	156	(955)	448
Management of liquid resources				
Movement in short-term investments and fixed deposits (net)		(254)	974	(252)
Financing	30	(182)	(205)	(4)
(Decrease)/increase in cash in the year		(280)	(186)	192

Financial Statements

Basis of consolidation and presentation of financial information

The financial statements have been prepared using the merger method of accounting in relation to the merger of Zeneca Group PLC and Astra AB which became effective on 6 April 1999. Under merger accounting, the results and cash flows of Zeneca Group PLC and Astra AB are combined from the beginning of the financial period in which the merger occurred and their assets and liabilities combined at the amounts at which they were previously recorded after adjusting to achieve consistency of accounting policies. Profit and loss account, balance sheet and cash flow comparatives are restated on the combined basis. See Note 31 for further information.

Following completion of the merger, AstraZeneca PLC's share capital has been redenominated from sterling into US dollars and, as the US dollar is now considered to be the primary currency in which the group conducts business, these and all subsequent financial statements will therefore be presented in US dollars. The parent company's functional currency has also changed as a result.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent 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.

Following the merger of Astra AB and Zeneca Group PLC a detailed comparison has been undertaken of the accounting conventions used by the two companies. As a result, there has been a reclassification of agrochemicals rebates from cost of sales to sales of \$95m in 1998 (1997 \$67m). This is in line with industry practice.

Continuing operations

Continuing operations include the ongoing Healthcare operations of the group and the group's agrochemicals business. Zeneca Agrochemicals (excluding the Advanta joint venture) has been classified as 'Operations to be discontinued' following the announcement on 2 December 1999 of the agreement with Novartis to spin off and merge the two companies' agrochemicals businesses to create a new company, to be named Syngenta AG.

Discontinued operations

Following the sale of the Zeneca Specialties business on 30 June 1999, Zeneca Specialties results (including the contract manufacture of textile colour intermediates for BASF which was retained by AstraZeneca and which ceased early in 2000) for the year have been reported separately as discontinued operations. Marlow Foods is now classified in 'Other Trading' within continuing operations.

The following new accounting standards were adopted during the year:

UK Financial Reporting Standard 12 – 'Provisions, Contingent Liabilities and Contingent Assets' sets out the appropriate recognition criteria and measurement bases to be applied to provisions, contingent liabilities and contingent assets. The adoption had no impact on prior years' profits or cash flows, nor on net assets at 31 December 1998.

UK Financial Reporting Standard 13 – 'Derivatives and Other Financial Instruments' sets out the narrative and numerical disclosure required regarding information about the impact of financial instruments on an entity's risk profile, how the risks arising from financial instruments might affect an entity's performance and financial condition and how they are being managed. Such disclosures are provided in Note 20.

In addition, the following new accounting standards have been issued but were not adopted:

UK Financial Reporting Standard 15 – 'Tangible Fixed Assets' is applicable for accounting periods ending on or after 23 March 2000. The standard sets out the principles of accounting for initial measurement, valuation and depreciation of tangible fixed assets, with the exception of investment properties. AstraZeneca will adopt this standard in 2000. The impact of adoption on AstraZeneca's financial statements is not anticipated to be material.

UK Financial Reporting Standard 16 – 'Current Tax' specifies how current tax, in particular withholding tax and tax credits, should be reflected in financial statements. AstraZeneca will adopt this standard in 2000. The impact of adoption on AstraZeneca's financial statements is not anticipated to be material.



Accounting policies

Basis of Accounting

The financial statements are prepared under the historical cost convention, modified to include the market value of certain current asset investments held by group subsidiaries as described below, in accordance with the Companies Act 1985 and United Kingdom Generally Accepted Accounting Principles (UK GAAP). Where there are significant differences to US GAAP these have been described in the UK/US GAAP section on pages 120 to 128. The net profit and shareholders' funds in accordance with International Accounting Standards are not significantly different from those presented under UK GAAP. The following paragraphs describe the main accounting policies under UK GAAP. The accounting policies of some overseas subsidiaries and associated undertakings do not conform with UK GAAP and, where appropriate, adjustments are made on consolidation in order to present the group financial statements on a consistent basis.

Depreciation and Amortisation

AstraZeneca's policy is to write off the cost of each tangible fixed asset evenly over its estimated remaining life. Reviews are made periodically of the estimated remaining lives of individual productive assets, taking account of commercial and technological obsolescence as well as normal wear and tear. Under this policy it becomes impracticable to calculate average asset lives exactly. However, the total lives approximate to 25 years for buildings and 15 years for plant and equipment. Intangible assets, including patents, acquired are capitalised and amortised on a straight line basis over their estimated useful lives (generally not exceeding 20 years) in line with the benefits accruing. If related products fail, the remaining unamortised amounts are immediately written off to revenue expense. Internally developed intangible assets are not capitalised. All fixed assets are reviewed for impairment when there are indications that the carrying value may not be recoverable.

Environmental Liabilities

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, it is probable that expenditure on remedial work will be required and a reliable estimate can be made of the cost.

Foreign Currencies

Profit and loss accounts 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 group balance sheet.

Exchange gains and losses 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. In the consolidated financial statements exchange differences arising on consolidation of the net investments in overseas subsidiaries, joint ventures and associates are taken directly to reserves via the statement of total recognised gains and losses.

Goodwill

On the acquisition of a business, fair values are attributed to the net assets acquired. Goodwill arises where the fair value of the consideration given for a business exceeds the fair value of such net assets. Goodwill arising on acquisitions since 1998 is capitalised and amortised over its estimated useful life (generally not exceeding 20 years). The group's policy up to and including 1997 was to eliminate goodwill arising upon acquisitions against reserves. Such goodwill will remain eliminated against reserves until disposal or termination of the previously acquired business, when the profit or loss on disposal or termination will be calculated after charging the gross amount, at current exchange rates, of any such goodwill. Goodwill is reviewed for impairment when there are indications that the carrying value may not be recoverable.

Investments

An associate is an undertaking, not being a subsidiary or joint venture, in which AstraZeneca has a participating interest and over whose commercial and financial policy decisions AstraZeneca exercises significant influence.

A joint venture is an entity in which AstraZeneca holds an interest on a long-term basis and which is jointly controlled by AstraZeneca and one or more other venturers under a contractual arrangement.

AstraZeneca's share of the profits less losses of all significant joint ventures and associates is included in the group profit and loss account on the equity accounting basis or, in the case of joint ventures, the gross equity accounting basis. The holding value of significant associates and joint ventures in the group balance sheet is calculated by reference to AstraZeneca's equity in the net assets of such associates and joint ventures, as shown by the most recent accounts available, adjusted where appropriate and including goodwill on acquisitions made since 1 January 1998.

Financial Statements

Accounting policies (continued)

Fixed asset investments are stated at cost and reviewed for impairment if there are indications that the carrying value may not be recoverable.

Current asset investments held by the group's insurance company subsidiaries, to the extent that they are actively matched against insurance liabilities, are valued at market value and unrealised gains and losses are taken directly to reserves via the statement of total recognised gains and losses. Realised gains and losses are taken to the profit and loss account.

Leases

Assets held under finance leases are capitalised and included in tangible fixed assets at fair value. Each asset is depreciated over the shorter of the lease term or its useful life. The obligations related to finance leases, net of finance charges in respect of future periods, are included as appropriate under creditors due within, or creditors due after, one year. The interest element of the rental obligation is allocated to accounting periods during the lease term to reflect a constant rate of interest on the remaining balance of the obligation for each accounting period. Rentals under operating leases are charged to the profit and loss account as incurred.

Post-retirement Benefits

The pension costs relating to UK retirement plans are assessed in accordance with the advice of independent qualified actuaries. The amounts so determined include the regular cost of providing the benefits under the plans which it is intended should remain a level percentage of current and expected future earnings of the employees covered under the plans. Variations from the regular pension cost are spread on a systematic basis over the estimated average remaining service lives of current employees in the plans. Retirement plans of non-UK subsidiaries are accounted for in accordance with local conditions and practice. With minor exceptions, these subsidiaries recognise the expected cost of providing pensions on a systematic basis over the average remaining service lives of employees in accordance with the advice of independent qualified actuaries. The costs of providing post-retirement benefits other than pensions, principally healthcare, are charged to the profit and loss account on a consistent basis over the average service lives of employees. Such costs are assessed in accordance with the advice of independent qualified actuaries.

Research and Development

Research and development expenditure is charged to profit in the year in which it is incurred.

Stock Valuation

Finished goods are stated at the lower of cost or net realisable value and raw materials and other stocks at the lower of cost or replacement price. The first in, first out or an average method of valuation is used. In determining cost, depreciation is included but selling expenses and certain overhead expenses (principally central administration costs) are excluded. Net realisable value is determined as estimated selling price less costs of disposal.

Taxation

The charge for taxation is based on the profits 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. However, no provision is made for taxation deferred by reliefs unless there is reasonable evidence that such deferred taxation will be payable in the foreseeable future.

Turnover

Turnover excludes inter-company turnover and value added taxes. Revenue is recognised at the point at which title passes.

Principal Financial Instruments

Forward foreign exchange contracts for existing transactions are stated at fair value at the balance sheet date and the gains/losses arising are recognised in the group profit and loss account. Contracts to hedge anticipated exposures are not marked to market and gains/losses are deferred until the transaction is completed.

Forward currency option contracts are not marked to market as they are designated hedges and reduce the group's exposure to risk. The gains/losses on these contracts are deferred until the date of the underlying transaction being hedged is completed.

Interest rate swaps are accounted for on an accruals basis. Cross-currency swaps are translated at year end exchange rates; gains/losses arising are included in the measurement of the related liabilities and dealt with in the group profit and loss account or reserves as appropriate.

1 Composition of the group

The group financial statements consolidate the financial statements of AstraZeneca PLC (the 'Company') and its subsidiaries, of which there were 324 at 31 December 1999. Owing to local conditions and to avoid undue delay in the presentation of the group financial statements, Salick Health Care prepares its financial statements to 30 November.



Financial Statements

Notes relating to the financial statements

2 Group operating profit

1999

	Continuing operations				Total
	Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	
	\$m	\$m	\$m	\$m	\$m
Group turnover	15,134	2,657	-	654	18,445
Operating costs					
Cost of sales	(4,087)	(1,510)	(37)	(403)	(6,037)
Distribution costs	(230)	(84)	-	(29)	(343)
Research and development	(2,472)	(297)	(110)	(44)	(2,923)
Selling, general and administrative expenses	(4,915)	(545)	(1,015)	(110)	(6,585)
	(11,704)	(2,436)	(1,162)	(586)	(15,888)
Other operating income					
Government grants	-	-	-	-	-
Royalties	123	36	-	-	159
Other income	17	10	-	3	30
	140	46	-	3	189
Group operating profit	3,570	267	(1,162)	71	2,746
Year 2000 and EMU conversion costs included above	(48)	(7)	-	-	(55)
Charges included above					
- for depreciation	(600)	(128)	-	(28)	(756)
- for amortisation	(296)	(17)	-	-	(313)
- for impairment	-	-	(149)	-	(149)
Gross profit, as defined by the Companies Act 1985	11,047	1,147	(37)	251	12,408

3 Share of operating profits/(losses) of joint ventures and associates

1999

	Continuing operations				Total
	Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	
	\$m	\$m	\$m	\$m	\$m
Share of operating (loss)/profit of joint ventures	(10)	-	-	1	(9)
Share of operating profit of associates	-	2	-	-	2
	(10)	2	-	1	(7)

Financial Statements

Notes relating to the financial statements



1998				
Continuing operations				
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total
\$m	\$m	\$m	\$m	\$m
11,318	2,790	-	1,294	15,402
(2,651)	(1,511)	-	(799)	(4,961)
(201)	(107)	-	(59)	(367)
(2,103)	(286)	-	(84)	(2,473)
(3,936)	(588)	(72)	(216)	(4,812)
(8,891)	(2,492)	(72)	(1,158)	(12,613)
1	1	-	-	2
56	38	-	-	94
62	22	163	10	257
119	61	163	10	353
2,546	359	91	146	3,142
(53)	(26)	-	(11)	(90)
(508)	(116)	-	(56)	(680)
(131)	(10)	-	-	(141)
-	-	-	-	-
8,667	1,279	-	495	10,441

1997				
Continuing operations				
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total
\$m	\$m	\$m	\$m	\$m
9,202	2,605	-	1,359	13,166
(1,810)	(1,401)	-	(852)	(4,063)
(185)	(107)	-	(72)	(364)
(1,824)	(267)	-	(79)	(2,170)
(3,093)	(526)	-	(219)	(3,838)
(6,912)	(2,301)	-	(1,222)	(10,435)
-	2	-	-	2
47	31	-	-	78
13	28	-	5	46
60	61	-	5	126
2,350	365	-	142	2,857
(12)	(9)	-	(3)	(24)
(435)	(97)	-	(53)	(585)
(91)	-	-	-	(91)
-	-	-	-	-
7,392	1,204	-	507	9,103

1998				
Continuing operations				
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total
\$m	\$m	\$m	\$m	\$m
534	-	-	4	538
-	1	-	-	1
534	1	-	4	539

1997				
Continuing operations				
Ongoing operations	Operations to be discontinued	Exceptional items	Discontinued operations	Total
\$m	\$m	\$m	\$m	\$m
717	-	-	3	720
-	2	-	-	2
717	2	-	3	722

Financial Statements

Notes relating to the financial statements

3 Share of operating profits/(losses) of joint ventures and associates (continued)

On 1 July 1998, Astra Merck Inc., the joint venture with Merck Inc., was restructured in connection with the formation of a new operating entity and the results of these US operations have been fully consolidated since this date. Prior to this restructuring, the joint venture has been accounted for, under UK GAAP, on the equity accounting basis in these financial statements. The group's 50% share of Astra Merck Inc.'s results in 1997 and the first six months of 1998, which are included within 'Continuing Operations', and the share of net assets at 31 December 1997 and 30 June 1998 were as follows:

Profit and loss account	6 months	12 months
	to 30 June 1998	to 31 December 1997
	\$m	\$m
Turnover	857	1,169
Profit on ordinary activities before taxation	536	716
Taxation	(210)	(315)
Profit on ordinary activities after taxation	326	401

Balance sheet	30 June	31 December
	1998	1997
	\$m	\$m
Fixed assets	565	602
Current assets	661	393
Creditors due within one year	(660)	(237)
Creditors due after one year or more	(30)	(43)
Net assets	536	715

4 Note of historical cost profits and losses

There were no material differences between reported profits and losses and historical cost profits and losses on ordinary activities before taxation.

5 Exceptional items

	1999	1998	1997
	\$m	\$m	\$m
Integration and synergy costs	(864)	-	-
AstraZeneca L.P. restructuring costs	(28)	(72)	-
Salick Health Care – impairment and rationalisation costs	(145)	-	-
Agrochemicals restructuring costs	(125)	-	-
Granting of US <i>Imdur</i> marketing rights	-	163	-
Exceptional items included in operating profits	(1,162)	91	-
Gain on disposal of Specialties business (after charging \$406m of goodwill previously written off to reserves)	237	-	-
Loss on closure of organophosphate intermediates business	-	(46)	-
Profits less losses on sale and closure of operations	237	(46)	-
Merck 'Trigger Event' payment and related costs	(809)	-	-
Other merger costs	(204)	-	-
Merger costs	(1,013)	-	-
Profit on sale of fixed assets	-	17	-
Total exceptional items before taxation	(1,938)	62	-
Net taxation credit/(charge)	351	(4)	-
Total exceptional items after taxation	(1,587)	58	-



5 Exceptional items (continued)

Details of the 1999 exceptional items are as follows:

- A charge of \$864m for the costs committed by the end of 1999 on the AstraZeneca integration and synergy programme (including \$379m manpower related costs, \$160m legal and other advisors' costs, \$145m in respect of information systems integration, \$45m for asset impairment and \$135m other costs) of which \$316m relates to integration and \$548m to synergy. Detailed plans now indicate that the total cost of this programme is expected to be \$1.3bn compared with original estimates at the time of the merger announcement of \$1.2bn. Job reductions in excess of 2,800 were achieved in 1999 and the detailed plans indicate that the overall target of 6,000 job reductions will be met.
- A charge of \$28m (1998 \$72m) to complete the programme to rationalise Astra's US operations following the Astra Merck Inc. restructuring in mid 1998.
- A charge of \$145m to recognise the consequence of refocussing the Salick Health Care business on a smaller base of profitable cancer centres and the impairment of certain fixed asset carrying values (\$78m) and debtors in the light of the prospects for the business.
- A charge of \$125m in relation to restructuring projects commenced by Zeneca Agrochemicals resulting in some 600 job losses and including \$26m of asset impairments.
- A gain of \$237m before tax realised on the sale of Zeneca Specialties (\$140m after tax) after allowing for the write back of goodwill (\$406m) previously charged to reserves, costs of separation from other AstraZeneca businesses (including \$63m asset impairments) and provisions for pension liabilities.
- Merger costs of \$1,013m, including the \$809m trigger event payment to Merck (including related costs) following the merger of Astra and Zeneca and asset impairments of \$6m. This research and development payment was made in exchange for the release by Merck of certain claims under a license agreement with a Merck affiliate (see Note 36).

The 1998 exceptional charges included rationalisation costs of Astra's US operations (as noted above), a gain on granting US *Imdur* marketing rights of \$163m, a loss on closure of the organophosphates intermediates business of \$46m and profit on sale of fixed assets of \$17m.

6 Net interest

	1999	1998	1997
	\$m	\$m	\$m
Interest payable and similar charges			
Loan interest	(57)	(64)	(61)
Interest on short-term borrowings and other financing costs	(91)	(67)	(58)
Discount on liability	(19)	-	-
Joint ventures	(3)	(2)	(2)
	(170)	(133)	(121)
Interest receivable and similar income from investments			
Securities	70	139	108
Short-term deposits	95	39	92
Joint ventures	1	2	2
	166	180	202
Net interest (payable)/receivable	(4)	47	81

The discounting charge above relates to amounts owed in respect of the re-acquisition of certain distribution rights which are payable over the next four years. All interest has been classified within ongoing operations as the management of the group's liquidity and funding is carried out by the central treasury function and it is not practicable to allocate interest to the different reporting segments.

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Notes relating to the financial statements

7 Taxation

Profit on ordinary activities before taxation, as shown in the group profit and loss account, was as follows:

	1999	1998	1997
	\$m	\$m	\$m
United Kingdom	176	670	938
Overseas	1,783	3,029	2,722
	1,959	3,699	3,660

Taxes on profit on ordinary activities were as follows:

UK taxation			
Corporation tax	367	319	350
Double taxation relief	(168)	(104)	(112)
Deferred taxation	(58)	(21)	12
	141	194	250
Overseas taxation			
Overseas taxes	845	692	538
Deferred taxation	(172)	(14)	(22)
	673	678	516
Share of taxation of joint ventures and associates	1	214	315
Tax on profit on ordinary activities	815	1,086	1,081

The charge for taxation has been allocated between ongoing operations, operations to be discontinued and discontinued operations based on the effective tax rates for the group in the territories in which these operations are based.

UK and overseas taxation have been provided at current rates on the profits earned for the periods covered by the group financial statements. 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. No taxes have been provided for unremitted earnings of group companies overseas as these are, in the main, considered permanently employed in the businesses of these companies and, in the case of joint ventures and associates, the taxes would not be material. Cumulative unremitted earnings of overseas subsidiaries and related undertakings totalled approximately \$9,213m at 31 December 1999. 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.

Exceptional items included in tax on ordinary activities

Tax (credit)/charge on exceptional items*	(351)	4	–
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* Includes deferred tax relief of \$375m (1998 \$7m, 1997 \$nil).



7 Taxation (continued)

Statement of total recognised gains and losses

In certain circumstances, tax charges or credits on currency differences on borrowings are taken to reserves via the statement of total recognised gains and losses. Tax charges on such currency translation differences amounted to \$22m in 1999 (1998 \$2m credit, 1997 \$2m credit), and have been reported in the statement of total recognised gains and losses.

Tax reconciliation to UK statutory rate

The table below reconciles the United Kingdom statutory tax charge to the group's charge on profit on ordinary activities before taxation.

	1999	1998	1997
	\$m	\$m	\$m
Profit on ordinary activities before taxation	1,959	3,699	3,660
Taxation charge at United Kingdom corporation tax rate of 30.25% for 1999 (31% for 1998, 31.5% for 1997)	593	1,147	1,153
Provisions not allowable	–	17	16
Timing differences not recognised	280	(53)	(26)
Exceptional items	235	–	–
Net effect of lower rates and eligible costs in other jurisdictions	(266)	(91)	(97)
Other	(27)	66	35
Taxes on profit on ordinary activities	815	1,086	1,081

Balance sheet	1999	1998	1997
	\$m	\$m	\$m
Deferred taxation asset movement			
At beginning of year	173	72	130
Profit and loss account	230	35	10
Other movements	(34)	66	(68)
At end of year	369	173	72

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Notes relating to the financial statements

7 Taxation (continued)

Deferred taxation

The amounts of deferred taxation accounted for in the group balance sheet and the full potential amounts of deferred taxation comprised the following deferred tax liabilities and assets:

	Year ended 31 December 1999			Year ended 31 December 1998		
	Partial provision for deferred tax	Not accounted for deferred tax	Full provision for deferred tax	Partial provision for deferred tax	Not accounted for deferred tax	Full provision for deferred tax
	\$m	\$m	\$m	\$m	\$m	\$m
Deferred tax liabilities						
UK fixed assets	–	455	455	–	505	505
Non-UK fixed assets	63	303	366	3	235	238
Capital gains rolled over	–	99	99	–	68	68
Interest accruals	13	–	13	22	–	22
Other	78	90	168	57	20	77
	154	947	1,101	82	828	910
Deferred tax assets						
Intercompany inventory transfers	–	326	326	–	173	173
Merger, integration and restructuring charges	328	35	363	19	4	23
Environmental	36	26	62	45	15	60
Pension and post-retirement benefits	62	81	143	9	133	142
Other	97	354	451	182	134	316
	523	822	1,345	255	459	714
Valuation allowance	–	(4)	(4)	–	(5)	(5)
	523	818	1,341	255	454	709
Deferred tax asset/(liability)	369	(129)	240	173	(374)	(201)



8 Dividends

	1999 Per Share	1998 Per Share	1997 Per Share	1999 \$m	1998 \$m	1997 \$m
Zeneca Group PLC						
Interim	–	£0.14	£0.135	–	220	210
Final	–	£0.28	£0.250	–	448	388
	–	£0.42	£0.385	–	668	598
Astra AB						
Dividend	–	SEK1.90	SEK1.80	–	393*	388
AstraZeneca PLC						
Interim, paid on 25 October 1999	\$0.23	–	–	408	–	–
Second interim, to be confirmed as final, payable 17 April 2000	\$0.47	–	–	834	–	–
	\$0.70	–	–	1,242	–	–
				1,242	1,061	986

* The record date for the payment of Zeneca's final dividend and Astra's dividend for the 1998 fiscal year was 9 April 1999. Former Astra stockholders who accepted the merger offer prior to the record date received a dividend corresponding to 28 pence per AstraZeneca share (total payment \$359m). Astra stockholders who did not accept the merger offer prior to the record date received Astra's proposed dividend of SEK1.90 per share.

9 Earnings per \$0.25 Ordinary Share

	1999	1998	1997
Net profit for the financial year before exceptional items (\$m)	2,730	2,553	2,570
Exceptional items after tax (\$m) (see Note 5)	(1,587)	58	–
Net profit for the financial year (\$m)	1,143	2,611	2,570
Earnings per Ordinary Share before exceptional items (\$)	\$1.54	\$1.44	\$1.45
(Loss)/gain per Ordinary Share on exceptional items (\$)	(\$0.90)	\$0.03	–
Earnings per Ordinary Share (\$)	\$0.64	\$1.47	\$1.45
Diluted earnings per Ordinary Share before exceptional items (\$)	\$1.54	\$1.43	\$1.44
Diluted (loss)/gain per Ordinary Share on exceptional items (\$)	(\$0.90)	\$0.03	–
Diluted earnings per Ordinary Share (\$)	\$0.64	\$1.46	\$1.44
Weighted average number of Ordinary Shares in issue for basic earnings (millions)	1,776	1,779	1,777
Dilutive impact of share options outstanding (millions)	3	4	3
Diluted average number of Ordinary Shares in issue (millions)	1,779	1,783	1,780

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 33. The earnings figures used in the calculations above are unchanged for diluted earnings per Ordinary Share.

Earnings per Ordinary Share before exceptional items has been calculated to eliminate the impact of exceptional items on the results of the business.

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Notes relating to the financial statements

10 Segment information

Classes of Business

AstraZeneca's principal reporting segments for ongoing operations are Healthcare (including Pharmaceuticals and Salick Health Care), and Other (including Marlow Foods and miscellaneous operations). Continuing operations also includes the Zeneca Agrochemicals business, which has been classified as 'operations to be discontinued'. Each of these segments is managed and monitored separately and represent strategic businesses that offer different products and serve different markets. A description of the principal activities of each of the businesses is given in the Operational Review on pages 11 to 31. Discontinued operations comprise the former Zeneca Specialties business, with the exception of Marlow Foods which is now included in 'Other trading' within continuing operations.

	Turnover		
	1999	1998	1997
	\$m	\$m	\$m
Healthcare	15,042	11,223	9,124
Pharmaceuticals	14,834	11,015	8,926
Salick Health Care	208	208	198
Other trading	92	95	78
Ongoing operations	15,134	11,318	9,202
Operations to be discontinued – Agrochemicals			
External	2,657	2,790	2,605
Intra-Group	3	–	–
	2,660	2,790	2,605
Continuing operations	17,794	14,108	11,807
Discontinued operations – Specialties			
External	654	1,294	1,359
Intra-Group	3	8	13
	657	1,302	1,372
Sub-total	18,451	15,410	13,179
Intra-Group eliminations	(6)	(8)	(13)
Group turnover	18,445	15,402	13,166
Share of joint ventures' turnover	208	1,080	1,408
Group turnover and share of joint ventures' turnover	18,653	16,482	14,574

The group's policy is to transfer products internally at external market prices.

	Operating profit/(loss) after exceptionals			Profit/(loss) before interest and taxation		
	1999	1998	1997	1999	1998	1997
	\$m	\$m	\$m	\$m	\$m	\$m
Profit/(loss) arising in						
Healthcare	2,558	2,664	2,377	1,545	2,664	2,377
Pharmaceuticals	2,711	2,678	2,372	1,698	2,678	2,372
Salick Health Care	(153)	(14)	5	(153)	(14)	5
Other trading	(25)	(27)	(27)	(25)	(10)	(27)
Ongoing operations	2,533	2,637	2,350	1,520	2,654	2,350
Operations to be discontinued – Agrochemicals	142	359	365	142	359	365
Continuing operations	2,675	2,996	2,715	1,662	3,013	2,715
Discontinued operations – Specialties	71	146	142	308	100	142
	2,746	3,142	2,857	1,970	3,113	2,857
Share of operating (loss)/profit of joint ventures and associates				(7)	539	722
				1,963	3,652	3,579

Corporate overheads have been allocated to each business segment on a consistent basis over the periods presented. The effect of these allocations is not material.



10 Segment information (continued)

Operating profit/(loss) is stated after Year 2000 and EMU compliance costs as follows:

	1999	1998	1997
	\$m	\$m	\$m
Healthcare	45	44	9
Pharmaceuticals	41	31	8
Salick Health Care	4	13	1
Other trading	3	9	3
Ongoing operations	48	53	12
Operations to be discontinued – Agrochemicals	7	26	9
Continuing operations	55	79	21
Discontinued operations – Specialties	–	11	3
	55	90	24

	Net assets/(liabilities)			Total assets		
	1999	1998	1997	1999	1998	1997
	\$m	\$m	\$m	\$m	\$m	\$m
Healthcare	7,496	6,975	5,633	12,403	10,225	7,635
Pharmaceuticals	7,439	6,828	5,515	12,288	10,023	7,473
Salick Health Care	57	147	118	115	202	162
Other trading	(108)	88	23	564	609	564
Ongoing operations	7,388	7,063	5,656	12,967	10,834	8,199
Operations to be discontinued – Agrochemicals	1,860	2,027	1,387	2,879	2,977	2,234
Continuing operations	9,248	9,090	7,043	15,846	13,811	10,433
Discontinued operations – Specialties	(164)	656	693	19	1,002	1,119
Sub-total	9,084	9,746	7,736	15,865	14,813	11,552
Intra-Group eliminations	–	–	–	(102)	(17)	(23)
Non-operating assets*	1,144	1,074	1,729	3,939	3,520	4,346
Investments in joint ventures and associates	114	162	141	114	162	141
	10,342	10,982	9,606	19,816	18,478	16,016

* Non-operating assets include short-term investments and cash, short-term borrowings, loans, and debtors and creditors not attributable to individual business segments.

	Capital expenditure**			Depreciation, amortisation and impairment		
	1999	1998	1997	1999	1998	1997
	\$m	\$m	\$m	\$m	\$m	\$m
Healthcare	2,963	1,076	979	1,004	617	513
Pharmaceuticals	2,922	1,031	940	915	607	503
Salick Health Care	41	45	39	89	10	10
Other trading	19	21	69	21	22	13
Ongoing operations	2,982	1,097	1,048	1,025	639	526
Operations to be discontinued – Agrochemicals	194	333	232	171	126	97
Continuing operations	3,176	1,430	1,280	1,196	765	623
Discontinued operations – Specialties	55	96	95	91	56	53
	3,231	1,526	1,375	1,287	821	676

** Capital expenditure includes expenditure on intangible assets. Pharmaceuticals capital expenditure in 1999 included the \$967m first option payment to Merck and \$720m in respect of the re-acquisition of marketing rights.

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10 Segment information (continued)

Geographic areas

The tables below show information by geographic area and, for turnover and tangible fixed assets, material countries. The figures for each area show the turnover, operating profit and profit on ordinary activities before interest and taxation made by companies located in that area/country, together with net operating assets and tangible fixed assets owned by the same companies; export sales and the related profit are included in the areas from which those sales were made.

	Turnover		
	1999	1998	1997
	\$m	\$m	\$m
United Kingdom			
External	1,115	1,116	1,151
Intra-Group	1,905	1,553	1,385
	3,020	2,669	2,536
Continental Europe			
France	864	723	604
Germany	849	861	814
Italy	545	448	390
Netherlands	284	245	221
Spain	441	273	207
Sweden	599	639	664
Others	950	855	790
Intra-Group	1,203	862	782
	5,735	4,906	4,472
The Americas			
Brazil	132	179	171
Canada	419	367	342
United States*	7,344	4,331	2,463
Others	162	137	121
Intra-Group	201	182	142
	8,258	5,196	3,239
Asia, Africa & Australasia			
Japan	715	567	677
Others	715	577	587
Intra-Group	120	74	69
	1,550	1,218	1,333
Ongoing operations	18,563	13,989	11,580
Operations to be discontinued – Agrochemicals	3,971	4,117	3,753
Continuing operations	22,534	18,106	15,333
Discontinued operations – Specialties	784	1,553	1,634
Sub-total	23,318	19,659	16,967
Intra-Group eliminations	(4,873)	(4,257)	(3,801)
	18,445	15,402	13,166

* As disclosed above, sales in the United States do not include the group's share of sales of Astra Merck Inc., which amounted to \$857m for the first six months of 1998 and \$1,169m for 1997.

Export sales from the UK totalled \$3,587m for the year ended 31 December 1999 (1998 \$3,388m, 1997 \$3,119m).

Turnover of operations to be discontinued is primarily in the UK \$1,408m (1998 \$1,401m, 1997 \$1,269m) and the Americas \$1,381m (1998 \$1,593m, 1997 \$1,366m).



10 Segment information (continued)

	Operating profit after exceptional items			Profit after exceptional items before interest and taxation		
	1999	1998	1997	1999	1998	1997
	\$m	\$m	\$m	\$m	\$m	\$m
Profit from						
United Kingdom	443	552	800	278	548	828
Continental Europe	1,572	1,160	968	1,515	1,163	948
The Americas	478	790	436	(322)	1,344	1,136
Asia, Africa & Australasia	40	135	146	39	133	155
Ongoing operations	2,533	2,637	2,350	1,510	3,188	3,067
Operations to be discontinued – Agrochemicals	142	359	365	144	360	367
Continuing operations	2,675	2,996	2,715	1,654	3,548	3,434
Discontinued operations – Specialties	71	146	142	309	104	145
	2,746	3,142	2,857	1,963	3,652	3,579

Operating profit of operations to be discontinued is primarily in the UK \$32m (1998 \$27m, 1997 \$72m) and Continental Europe \$75m (1998 \$93m, 1997 \$64m).

	Net operating assets		
	1999	1998	1997
	\$m	\$m	\$m
United Kingdom	1,873	2,140	1,893
Continental Europe	3,638	1,001	1,010
The Americas	1,130	1,131	992
Asia, Africa & Australasia	747	2,791	1,761
Ongoing operations	7,388	7,063	5,656
Operations to be discontinued – Agrochemicals	1,860	2,027	1,387
Continuing operations	9,248	9,090	7,043
Discontinued operations – Specialties	(164)	656	693
	9,084	9,746	7,736

Net operating assets of operations to be discontinued are primarily in the UK \$1,250m (1998 \$1,364m, 1997 \$893m) and the Americas \$514m (1998 \$522m, 1997 \$275m).

	Tangible fixed assets		
	1999	1998	1997
	\$m	\$m	\$m
United Kingdom	1,531	1,471	1,344
Sweden	1,434	1,295	1,156
United States	623	612	663
Others	1,147	1,028	818
Ongoing operations	4,735	4,406	3,981
Operations to be discontinued – Agrochemicals	1,246	1,336	1,043
Continuing operations	5,981	5,742	5,024
Discontinued operations – Specialties	–	539	528
	5,981	6,281	5,552

Tangible fixed assets of operations to be discontinued are primarily in the UK \$741m (1998 \$812m, 1997 \$821m) and the United States \$321m (1998 \$360m, 1997 \$361m).

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10 Segment information (continued)

	1999	1998	1997
	\$m	\$m	\$m
Geographic markets			
Turnover in each geographic market in which customers located			
United Kingdom	863	888	903
Continental Europe	4,555	4,050	3,688
The Americas	8,140	5,068	3,142
Asia, Africa & Australasia	1,576	1,312	1,469
Ongoing operations	15,134	11,318	9,202
Operations to be discontinued – Agrochemicals	2,657	2,790	2,605
Continuing operations	17,791	14,108	11,807
Discontinued operations – Specialties	654	1,294	1,359
	18,445	15,402	13,166

Turnover by customer location of operations to be discontinued is primarily to the Americas \$1,275m (1998 \$1,483m, 1997 \$1,319m) and Continental Europe \$846m (1998 \$809m, 1997 \$472m).

Employees

Average number of people employed by the group in

United Kingdom	9,700	9,100	8,200
Continental Europe	19,200	17,000	16,800
The Americas*	12,900	12,700	10,100
Asia, Africa & Australasia	5,400	6,000	5,300
Ongoing operations	47,200	44,800	40,400
Operations to be discontinued – Agrochemicals	8,100	8,000	7,600
Continuing operations	55,300	52,800	48,000
Discontinued operations – Specialties	2,700	5,500	5,800
	58,000	58,300	53,800

* The number of employees in North America was affected by the agreement with Merck. Before 1 July 1998, employees of Astra Merck (1998 2,332, 1997 2,258) have not been included above, as the joint venture was not consolidated. From 1 July 1998 onwards, following the restructuring, all employees of the new subsidiary, AstraZeneca, L.P., have been included in the AstraZeneca Group.

The number of people employed by the group at the end of 1999 was 55,200 (1998 60,900, 1997 53,900) of which 47,000 related to ongoing operations.



11 Tangible fixed assets

	Land and buildings	Plant and equipment	Capital expenditure and assets in course of construction	Total tangible assets
	\$m	\$m	\$m	\$m
Cost				
At beginning of year	2,848	6,752	927	10,527
Exchange adjustments	(99)	(241)	(68)	(408)
Capital expenditure	58	347	1,071	1,476
Transfer of assets into use	179	669	(848)	–
Disposals and other movements	(191)	(1,166)	(43)	(1,400)
At end of year	2,795	6,361	1,039	10,195
Depreciation				
At beginning of year	815	3,431	–	4,246
Exchange adjustments	(32)	(127)	–	(159)
Disposals and other movements	(105)	(728)	–	(833)
Charge for year	114	642	–	756
Impairment	60	144	–	204
At end of year	852	3,362	–	4,214
Net book value at 31 December 1999	1,943	2,999	1,039	5,981
Net book value at 31 December 1998	2,033	3,321	927	6,281

Capital expenditure in the year of \$1,476m (1998 \$1,415m) did not include any capitalised finance leases (1998 \$2m); cash expenditure on tangible fixed assets was \$1,490m (1998 \$1,392m). Land and buildings includes non-depreciated land which cost \$206m (1998 \$210m).

The net book value of the tangible fixed assets of the group at 31 December 1999 included capitalised finance leases of \$6m, comprising cost of \$14m and accumulated depreciation thereon of \$8m. In respect of capitalised leases, the depreciation charge for the year was \$2m and finance charges were \$1m.

	1999	1998
	\$m	\$m
The net book value of land and buildings comprised		
Freeholds	1,932	2,012
Long leases (over 50 years unexpired)	5	5
Short leases	6	16
	1,943	2,033

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12 Goodwill and intangible assets

	Goodwill	Intangible assets	Total
	\$m	\$m	\$m
Cost			
At beginning of year	1,252	1,576	2,828
Exchange adjustments	(72)	(63)	(135)
Additions	4	1,755	1,759
Disposals and other movements	–	(45)	(45)
At end of year	1,184	3,223	4,407
Depreciation			
At beginning of year	36	352	388
Exchange adjustments	(8)	(7)	(15)
Disposals and other movements	–	(29)	(29)
Charge for year	63	250	313
Impairment	8	6	14
At end of year	99	572	671
Net book value at 31 December 1999	1,085	2,651	3,736
Net book value at 31 December 1998	1,216	1,224	2,440

13 Fixed asset investments

	Joint ventures	Associates	Other investments Listed	Other investments Unlisted	Total
	\$m	\$m	\$m	\$m	\$m
Cost					
At beginning of year	172	2	72	119	365
Additions	–	–	–	5	5
Disposals and other movements, including exchange	(34)	1	(21)	(104)	(158)
At end of year	138	3	51	20	212
Share of post-acquisition reserves					
At beginning of year	(15)	3	–	–	(12)
Retained loss	(16)	–	–	–	(16)
Exchange	1	–	–	–	1
At end of year	(30)	3	–	–	(27)
Net book value at 31 December 1999	108	6	51	20	185
Net book value at 31 December 1998	157	5	72	119	353

The market value of the listed investments at 31 December 1999 was \$111m (1998 \$63m).
The fair values of the unlisted investments are not materially different from their carrying values.

Share of joint ventures' assets and liabilities

	1999	1998
	\$m	\$m
Gross assets	218	256
Gross liabilities	(110)	(99)
	108	157

Information on principal subsidiaries, joint ventures and associates of the group is given on pages 118 and 119.



14 Stocks

	1999	1998
	\$m	\$m
Raw materials and consumables	581	509
Stocks in process	699	708
Finished goods and goods for resale	876	812
	2,156	2,029

15 Debtors

	1999	1998
	\$m	\$m
Amounts due within one year		
Trade debtors	3,026	3,120
Less: Amounts provided for doubtful debts	(118)	(139)
	2,908	2,981
Deferred taxation	78	80
Other debtors	619	241
Prepayments and accrued income*	225	327
	3,830	3,629
Amounts due after more than one year		
Deferred taxation	435	19
Other debtors	111	127
Prepayments and accrued income*	94	183
	640	329
Securitised rent receivables	-	5
	4,470	3,963

* Figures include prepaid pension costs (Note 32).

Provisions for doubtful debts

	1999	1998	1997
	\$m	\$m	\$m
Balance at beginning of year	139	127	112
Profit and loss account charge	60	39	53
Amounts utilised and other movements	(81)	(27)	(38)
Balance at end of year	118	139	127

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Notes relating to the financial statements

16 Short-term investments

	1999	1998
	\$m	\$m
Listed debt securities	542	1,395
Other debt securities	17	17
Investment securities	559	1,412
Fixed deposits	2,300	1,290
	2,859	2,702

The group's insurance subsidiaries hold cash and short-term investments totalling \$234m (1998 \$214m), of which \$150m (1998 \$103m) is required to meet insurance solvency requirements and which, as a result, is not readily available for the general purposes of the group. In addition, some \$453m of short-term investments shown above are committed as security against deferred payments due under a contractual obligation of the group (see Note 36).

17 Short-term borrowings

	1999	1998
	\$m	\$m
Bank borrowings		
Fixed securities	38	37
Secured by floating charge	6	-
Unsecured	299	224
	343	261
Other borrowings (unsecured)	1	86
	344	347



18 Other creditors

	1999	1998
	\$m	\$m
Amounts due within one year		
Trade creditors	1,614	1,600
Corporate taxation	640	444
Value added and payroll taxes and social security	55	75
Other creditors	1,753	784
Accruals	1,744	1,524
Dividends to Shareholders	834	841
	6,640	5,268
Amounts due after more than one year		
Other creditors	460	22
Grants not yet credited to income	2	3
	462	25

Included in other creditors are amounts totalling \$171m (1998 \$117m) to meet insurance obligations of the group's insurance subsidiaries. Also included in other creditors are amounts due within one year in connection with the group's exceptional charges as detailed in Note 5. The amounts comprise \$396m in respect of synergy and integration costs, \$94m trigger event payment to Merck, \$15m in respect of the Salick Health Care rationalisation, \$81m in respect of the Agrochemicals restructuring programmes and \$170m in respect of the Specialties divestment and other minor restructurings. The comparative balance included \$53m in respect of minor restructurings.

19 Loans

	Repayment Dates	1999	1998
		\$m	\$m
Secured loans			
Secured by fixed charge	2006/2007	19	26
Secured by floating charge	2003/2010	28	–
Total secured		47	26
Unsecured loans			
US dollars			
Bank loan – variable rate	2001	80	80
6.3% Guaranteed notes	2003	198	197
7% Guaranteed debentures	2023	295	295
Others	2000/2013	153	193
Total unsecured		726	765
Total loans		773	791
Less: current instalments of loans		(34)	(30)
Loans due after more than one year		739	761

In the above table loans are shown after taking account of associated cross-currency swaps (see Note 20).

Loans from banks included in the table above amounted to \$169m (1998 \$178m) of which \$42m (1998 \$9m) was secured.

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Notes relating to the financial statements

20 Financial instruments

A discussion of the group's objective, policy and strategy in respect of risk management and the use of financial instruments is included in the financial review on pages 45 to 47. The following disclosures exclude all short-term debtors and creditors.

Interest rate risks of financial assets and liabilities

The interest rate profile, after taking account of interest and currency swaps, of the financial assets and liabilities of the group as at 31 December 1999 was:

	Floating rate	Fixed rate	Financial liabilities on which no interest is paid	Total	Weighted average fixed interest rate	Weighted average period for which rate is fixed
	\$m	\$m	\$m	\$m	%	Years
Financial liabilities						
US dollar	172	506	453	1,131	6.8	15
Euro	34	89	–	123	6.7	3
Other	242	76	–	318	4.4	5
Total	448	671	453	1,572		
Financial assets						
US dollar	2,502	–	–	2,502		
Euro	178	–	–	178		
Other	608	–	–	608		
Total	3,288	–	–	3,288		

The floating rate financial liabilities comprise bank borrowings bearing interest at rates fixed by reference to local interbank rates.

Financial liabilities on which no interest is paid comprise deferred payments due relating to the re-acquisition of certain marketing rights.

The financial assets principally comprise cash on overnight deposit and short term investments with an average maturity of 44 days. These include deposits where the interest rate is fixed until maturity but, as the original maturity is less than one year, they are classified as floating rate financial instruments. The benchmark rates for financial assets are the LIBID rate for euro and US dollar liquidity balances and the average Federal Funds effective rate for US dollar overnight balances. In addition to the amounts above, financial assets include \$71m of other fixed asset investments on which no interest is received.

Currency exposures

One hundred per cent of the group's transactional currency exposures on working capital balances, which typically extend for up to three months, are hedged using forward foreign exchange contracts. As a result, as at 31 December 1999, there were no material monetary assets or liabilities in currencies other than the functional currencies of the group companies concerned, having taken into account the effect of forward exchange currency contracts that have been utilised to match foreign currency exposures.

Additionally approximately 50% of forecast future foreign currency transaction exposures extending for twelve months are selectively hedged. Currency exposures are aggregated into baskets representing the principal currency exposures (GBP, SEK, euro and yen) and then hedged using a mixture of purchased currency options and forward foreign exchange contracts. As at 31 December 1999 the group held forward and option contracts to hedge the following forecast foreign currency transaction exposures.



20 Financial instruments (continued)

1999
Hedged
amount

	\$m
Sterling payables	946
SEK payables	635
Euro receivables	704
Yen receivables	41

Maturity of financial liabilities

The maturity profile of the group's financial liabilities, other than short-term creditors such as trade creditors and accruals, at 31 December 1999 was as follows:

Analysis by year of repayment	1999			1998		
	Loans	Other	Total	Loans	Other	Total
	\$m	\$m	\$m	\$m	\$m	\$m
After five years	332	–	332	322	10	332
From five to four years	–	–	–	304	2	306
From four to three years	294	108	402	10	2	12
From three to two years	18	127	145	90	2	92
From two to one years	95	116	211	35	2	37
Due after more than one year	739	351	1,090	761	18	779
Due within one year	34	448	482	30	349	379
Total	773	799	1,572	791	367	1,158

Other financial liabilities comprise deferred payments to re-acquire certain maturity rights, short-term borrowings and finance leases.

Borrowing facilities

The group has various borrowing facilities available to it, the majority of which offer a currency option of US dollars, euros or sterling. Unused short-term credit facilities (both committed and uncommitted) totalled approximately \$2bn at 31 December 1999. Included in this were undrawn committed facilities in respect of which all conditions precedent had been met at that date as follows:

	1999	1998
	\$m	\$m
Expiring in one year or less	–	–
Expiring in more than one year but not more than two years	375	–
Expiring in more than two years	150	1,325
Total	525	1,325

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20 Financial instruments (continued)

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 1999 and 1998.

	1999 Carrying value	1999 Fair value	1998 Carrying value	1998 Fair value
	\$m	\$m	\$m	\$m
Primary financial instruments				
Short-term borrowings	(344)	(344)	(347)	(347)
Loans	(792)	(778)	(806)	(854)
Cash	429	429	710	710
Short-term investments	2,859	2,858	2,702	2,703
Fixed asset investments	71	131	191	182
Derivative financial instruments held to manage the interest rate and currency profile				
Cross-currency swaps	19	14	15	7
Derivative financial instruments held or issued to hedge the currency exposure on existing transactions				
Forward foreign exchange contracts	20	20	(13)	(13)
Forward currency option contracts	3	-	2	-
Derivative financial instruments held or issued to hedge the currency exposure on expected future transactions				
Forward foreign exchange contracts	-	(1)	-	1
Foreign currency option contracts	32	35	46	42

In addition to the primary financial instruments above, the group has financial liabilities of \$453m comprising deferred payments due, totalling \$513m before discounting.

The methods and assumptions used to estimate the fair values of financial instruments are as follows:

- Short-term investments – the fair value of listed investments is based on year end quoted market prices. For unlisted investments carrying values approximate fair value.
- Fixed asset investments (excluding equity investments in joint ventures and associates) – the fair value of listed investments is based on year end quoted market prices. For unlisted investments carrying values approximate fair value.
- Loans – the fair value of 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 frequency of resets; the fair value of remaining debt is estimated using appropriate zero coupon valuation techniques based on rates current at year end.
- Forward foreign exchange contracts – the group has forward foreign exchange contracts to sell currency for the purpose of hedging non-dollar commercial transaction exposures which existed at the date of the balance sheet and to hedge anticipated, but not firmly committed, non-dollar commercial transactions for 1999. The majority of the contracts for existing transactions had a maturity of six months or less from year end. The fair value of forward foreign exchange contracts is estimated using the spot rates of exchange existing at year end and accruing any interest differential.
- Forward currency option contracts – the group has forward currency option contracts to hedge anticipated, but not firmly committed, non-dollar commercial transactions for 1999. The fair value of option contracts is estimated using Black-Scholes valuation techniques as adapted by Garman Kohlhagen.
- Interest rate and cross-currency swaps – AstraZeneca uses interest rate and cross-currency swaps to hedge the group's exposure to fluctuations in interest rates and foreign exchange movements on borrowings in accordance with a formal risk management strategy. The fair value is estimated using appropriate zero coupon valuation techniques based on rates current at year end.



20 Financial instruments (continued)

The above financial instruments are subject to credit and market risk. AstraZeneca contains credit risk through the use of counterparty and product specific credit limits and by ongoing review procedures. All financial instruments are transacted with commercial banks and, in line with standard market practice, are not backed with cash collateral. The notional principal values of off balance sheet financial instruments do not represent amounts exchanged by the parties and are not a measure of the credit risk to the group of these instruments. The credit risk of these instruments is limited to the positive fair values of such contracts.

Market risk is the sensitivity of the value of financial instruments to changes in related currency and interest rates. The group is not exposed to material market risk because gains and losses on the derivative financial instruments are largely offset by gains and losses on the underlying assets, liabilities and transactions subject to hedge.

Hedges

The group's policy is to hedge 100% of transactional currency exposures and 50% of forecast future transaction exposures using forward foreign exchange contracts and foreign currency option contracts. It also uses cross-currency and interest rate swaps to manage its borrowings profile.

Gains and losses on instruments used for hedging are not recognised until the exposure that is being hedged is itself recognised. Unrecognised gains and losses on instruments used for hedging, and the movements therein, are as follows:

	Gains	Losses	Total net gains/(losses)
	\$m	\$m	\$m
Unrecognised gains and losses on hedges at 1 January 1999	1	(14)	(13)
Gains and losses arising in previous years that were recognised in 1999	1	(6)	(5)
Gains and losses arising in previous years that were not recognised in 1999	–	(8)	(8)
Unrecognised gains and losses on hedges at 31 December 1999	3	(9)	(6)
Gains and losses expected to be recognised in 2000	3	(4)	(1)
Gains and losses expected to be recognised in 2001 or later	–	(5)	(5)

21 Provisions for liabilities and charges

	Integration and synergies	Employee benefits	Environmental and other provisions	Total
	\$m	\$m	\$m	\$m
At 1 January 1998	–	733	316	1,049
Profit and loss account	–	115	42	157
Net amounts paid or becoming current	–	(127)	(125)	(252)
Acquisitions	–	62	45	107
Other movements, including exchange	–	13	(29)	(16)
At 31 December 1998	–	796	249	1,045
Profit and loss account	819	128	132	1,079
Net amounts paid or becoming current	(703)	(98)	(71)	(872)
Acquisitions and disposals	–	(11)	(4)	(15)
Other movements, including exchange	(2)	(35)	53	16
At 31 December 1999	114	780	359	1,253

The carried forward integration and synergies provision, as at 31 December 1999, comprises obligations in respect of integrating the pharmaceuticals businesses of Astra and Zeneca, the majority of which is expected to be spent in 2001. Employee benefit provisions comprise pension, post retirement and other employee benefit provisions. These will crystallise, in the main, over the estimated working lives of the employees concerned. The environmental provisions are principally in respect of sites in the US, further details of which are given in Note 36. Other provisions include \$144m in respect of deferred taxation.

No provision has been released or applied for any purpose other than that for which it was established.

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22 Reconciliation of movements in Shareholders' funds

	1999	1998	1997
	\$m	\$m	\$m
Shareholders' funds at beginning of year	10,929	9,552	9,022
Net profit for the financial year	1,143	2,611	2,570
Dividends	(1,242)	(1,061)	(986)
	(99)	1,550	1,584
Issues of AstraZeneca PLC Ordinary Shares	19	12	26
Repurchase of AstraZeneca PLC Ordinary Shares	(183)	-	-
Astra AB minority interest buy out	(142)	-	-
Goodwill written back/(written off)	410	-	(315)
Exchange adjustments on net assets	(740)	(178)	(766)
Translation differences on foreign currency borrowings	132	(7)	(5)
Tax on translation differences on foreign currency borrowings	(22)	2	2
Movement in unrealised holding gains and losses on short-term investments	-	2	1
Other movements	(2)	(4)	3
Net (reduction in)/addition to Shareholders' funds	(627)	1,377	530
Shareholders' funds at end of year	10,302	10,929	9,552

23 Reserves

	Share premium account	Capital redemption reserve	Merger reserve	Other reserves	Joint ventures and associates	Profit and loss account	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Astra	62	-	-	-	-	5,381	5,443
Zeneca	15	-	472	508	(22)	2,075	3,048
Merger reserve adjustment	(62)	-	111	-	-	-	49
Accounting policy alignment	-	-	-	(138)	-	23	(115)
At 31 December 1996	15	-	583	370	(22)	7,479	8,425
Profit retained for year					5	1,579	1,584
Share premiums	25						25
Goodwill written back				(315)			(315)
Exchange adjustments:							
Goodwill				41		(41)	-
Net assets					2	(768)	(766)
On foreign currency borrowings						(5)	(5)
Foreign currency borrowings tax effect						2	2
				41	2	(812)	(769)
Movement in unrealised holding gains and losses				1			1
Other movements						3	3
Net movements	25	-	-	(273)	7	770	529



23 Reserves (continued)

	Share premium account	Capital redemption reserve	Merger reserve	Other reserves	Joint ventures and associates	Profit and loss account	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 31 December 1997	40	-	583	97	(15)	8,249	8,954
Profit/(loss) retained for year					(3)	1,553	1,550
Share premiums	14					(4)	10
Exchange adjustments:							
Goodwill				(43)		43	-
Net assets					6	(184)	(178)
On foreign currency borrowings						(7)	(7)
Foreign currency borrowings tax effect						2	2
				(43)	6	(146)	(183)
Movement in unrealised holding gains and losses				2			2
Other movements						(4)	(4)
Net movements	14	-	-	(41)	3	1,399	1,375
At 31 December 1998	54	-	583	56	(12)	9,648	10,329
Loss retained for year					(16)	(83)	(99)
Share premiums	17						17
Redenomination of share capital				157			157
Transfer between reserves	131					(131)	-
Astra AB minority interest buy out			(142)				(142)
Repurchase of shares		1				(183)	(182)
Goodwill written back				410			410
Exchange adjustments:							
Goodwill				80		(80)	-
Net assets					1	(741)	(740)
On foreign currency borrowings						132	132
Foreign currency borrowings tax effect						(22)	(22)
				80	1	(711)	(630)
Movement in unrealised holding gains and losses							-
Other movements						(2)	(2)
Net movements	148	1	(142)	647	(15)	(1,110)	(471)
At 31 December 1999	202	1	441	703	(27)	8,538	9,858

The movement in other reserves in 1997 relates to goodwill on acquisitions and purchase of minority interest written off against reserves prior to the adoption of FRS 10 on 1 January 1998. The movements in the current year relate to the realisation of goodwill, principally on the disposal of Zeneca Specialties and the redenomination of share capital.

The cumulative amount of goodwill resulting from acquisitions, net of disposals, prior to the adoption of FRS 10, amounted to \$1,537m (1998 \$2,027m, 1997 \$1,984m), using 1999 year end rates of exchange.

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Notes relating to the financial statements

23 Reserves (continued)

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 United Kingdom taxation (after allowing for double taxation relief) if they were to be distributed as dividends (see Note 7).

The Company's Articles of Association state that borrowings, after deducting cash and short-term investments, must not exceed an amount equal to three times Shareholders' equity after adding back goodwill eliminated against Shareholders' equity on retained acquisitions and the amount set aside for deferred taxation. Any borrowings, cash or short-term investments held by partly owned subsidiaries are excluded from the calculation in so far as they are attributable to minorities.

24 Net cash inflow from trading operations

	1999	1998	1997
	\$m	\$m	\$m
Operating profit before exceptional items	3,908	3,051	2,857
Depreciation and amortisation	1,069	821	676
Stocks increase	(416)	(262)	(42)
Debtors increase	(448)	(479)	(321)
Creditors increase	645	818	309
Other non-cash movements	(59)	(132)	(16)
	4,699	3,817	3,463

25 Cash flows related to exceptional items

The exceptional cash outflow for the year includes \$28m attributable to rationalising Astra's operations in the US, \$909m merger costs (including \$713m for the Merck trigger event payment), \$303m in respect of synergy and integration costs (including manpower related costs of \$150m), \$338m in respect of the Specialties disposal and \$8m in respect of other restructuring and rationalisation projects.

The 1998 cash inflow included receipts in respect of the granting of *Imdur* marketing rights of \$163m net of payments relating to expenditure charged to exceptional provisions raised in prior years for business rationalisation and restructuring (including severance and other employee costs). It also includes \$7m of expenditure relating to the closure of the Organophosphate Intermediates business and \$72m in respect of the rationalisation of Astra's US operations. Included within the \$155m cash inflow from the disposal of fixed assets is \$87m relating to sale of fixed assets accounted for as an exceptional item.

The 1997 cash outflow is in respect of exceptional provisions raised in prior years.



26 Acquisitions

There were no significant acquisitions in 1999. The principal acquisitions during 1998 were the purchase of Ishihara Sangyo Kaisha Ltd's worldwide chlorothalonil business on 4 February 1998, the remaining 50% of the Astra Merck partnership on 30 June 1998, and the pharmaceuticals business of Orica Ltd on 4 September 1998. All these acquisitions have been accounted for by the acquisition method of accounting.

	1999 Total fair value	1998 Total fair value	1997 Total fair value
	\$m	\$m	\$m
Fixed assets	–	1,028	3
Current assets	10	1,298	5
Creditors due within one year	(7)	(953)	(5)
Creditors due after more than one year	–	(53)	–
Provisions for liabilities and charges	–	(79)	–
Minority interest	(1)	–	–
Fair value of net assets acquired	2	1,241	3
Goodwill acquired	7	1,322	80
Consideration for subsidiaries and operations acquired	9	2,563	83
Purchases of minority interest	20	7	241
	29	2,570	324
Less:			
Equity accounted carrying value of existing interest	–	(537)	–
Cash included in undertaking acquired	(1)	(3)	(3)
Deferred consideration	(5)	(17)	–
Net cash consideration	23	2,013	321

Assets and liabilities are adjusted to their fair values based on external valuations and internal assessments. There were no significant differences between book and fair values in respect of the acquisitions made in the year.

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27 Disposals

	1999 Discontinued Specialties	1999 Continuing Other	1999 Total
	\$m	\$m	\$m
Fixed assets	561	6	567
Current assets	646	5	651
Creditors due within one year	(374)	–	(374)
Creditors due after more than one year and provisions	(18)	–	(18)
Book value of net assets disposed	815	11	826
Disposal costs	567	10	577
Goodwill previously charged to reserves written back on disposal	406	4	410
Profit on disposals	237	–	237
	2,025	25	2,050
Less			
Cash included in undertakings disposed	(20)	–	(20)
Disposal costs	(49)	–	(49)
Cash consideration	1,956	25	1,981

The sale consideration received is principally in relation to the sale of the group's Specialties business, which was completed on 30 June 1999. Zeneca Specialties results have been consolidated for the period until disposal (to 30 June 1999) but reported separately as 'discontinued operations'.

Other disposals represent the disposal of the dialysis business of Salick Health Care.

Prior to its disposal, the Specialties business contributed \$44m to operating cash flows before exceptional items, absorbed \$29m in respect of exceptional items and \$41m in respect of fixed capital expenditure.

28 Reconciliation of net cash flow to movement in net funds

	1999	1998	1997
	\$m	\$m	\$m
(Decrease)/increase in cash	(280)	(186)	192
Cash outflow from decrease in loans, short-term borrowings and leases	21	217	29
Cash outflow/(inflow) from increase/(decrease) in short-term investments	254	(974)	252
Change in net funds resulting from cash flows	(5)	(943)	473
Debt released on disposals/cash acquired on acquisitions	12	391	–
Other non-cash changes	–	(2)	(92)
Exchange movements	(92)	(63)	(349)
Movement in net funds	(85)	(617)	32
Net funds at 1 January	2,254	2,871	2,839
Net funds at 31 December	2,169	2,254	2,871



29 Analysis of net funds

	At 1 Jan 1999	Cash flow	Acquisitions* and disposals	Other non-cash	Exchange movements	At 31 Dec 1999
	\$m	\$m	\$m	\$m	\$m	\$m
Loans due after 1 year	(761)	(27)	–	30	19	(739)
Current instalments of loans	(30)	28	–	(30)	(2)	(34)
Finance leases	(20)	6	12	–	–	(2)
Total loans and lease finance	(811)	7	12	–	17	(775)
Short-term investments	2,702	254	–	–	(97)	2,859
Cash	710	(249)	–	–	(32)	429
Overdrafts	(144)	(31)	–	–	8	(167)
Short-term borrowings, excluding overdrafts	(203)	14	–	–	12	(177)
	3,065	(12)	–	–	(109)	2,944
Net funds	2,254	(5)	12	–	(92)	2,169
Financing item included in cash movements above						
Net purchase of shares		161				
Net cash inflow before management of liquid resources and financing		156				

* Excluding cash and overdrafts

30 Financing

	Notes	1999 \$m	1998 \$m	1997 \$m
Issues of AstraZeneca PLC Ordinary Shares		19	12	25
Repurchase of AstraZeneca PLC Ordinary Shares		(183)	–	–
Issue of shares by subsidiaries to minority interests		3	–	–
Issues of shares	29	(161)	12	25
Repayment of lease finance	29	(6)	(9)	(13)
New loans		39	–	–
Loans repaid		(40)	(110)	(38)
Net decrease in short-term borrowings	29	(14)	(98)	22
		(15)	(208)	(16)
Net cash outflow from financing		(182)	(205)	(4)

The only major non-cash financing transaction was the issue of shares in connection with the merger, as described in Note 40.

31 Merger accounting

The financial statements have been prepared using the merger method of accounting in relation to the merger of Zeneca and Astra. Under merger accounting, the results and cash flows of Zeneca and Astra are combined from the beginning of the financial period in which the merger occurred. Their assets and liabilities are combined at the amounts at which they were previously recorded, after adjusting to achieve consistency of accounting policies. Profit and loss account, balance sheet and cash flow comparatives are restated on the combined basis.

The merger became effective on 6 April 1999. The company issued a total of 825,932,791 ordinary shares with a nominal value of \$206m to Astra shareholders under the terms of the merger agreement between Zeneca and Astra. In addition, AstraZeneca has provided \$142m in connection with the purchase of the remaining outstanding Astra shares.

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31 Merger accounting (continued)

Set out below are:

- (a) The nature of the accounting adjustments made to align Astra's accounting policies with those of Zeneca.
- (b) Analyses of the principal components of the current and prior year profit and loss accounts and statements of total recognised gains and losses into pre and post-merger amounts including analyses of the pre-merger amounts between Astra and Zeneca.
- (c) The net assets of Astra and Zeneca at 31 March 1999, being the nearest practical date to the actual date of the merger.

Accounting adjustments to align Astra's accounting policies with those of Zeneca and in accordance with UK GAAP Astra Merck

The group's interest in Astra Merck was recorded in the translated historical financial statements of Astra, in accordance with the proportional method, for the periods until 30 June 1998. This has been restated to the gross equity method required under UK GAAP. This adjustment has no impact on profit after taxation or net assets.

Consolidation bases

Astra's foreign subsidiaries' financial statements were translated using the temporal method. According to Astra's policy, non-monetary assets and shareholders' equity were translated to Swedish kronor at the exchange rate in effect at the time of acquisition or year end respectively. Under the closing rate method applied by Zeneca, in accordance with UK GAAP, all balance sheet items of overseas subsidiaries were translated using the exchange rate at the balance sheet date and all profit and loss account items were translated using the average exchange rate for the period. Resulting differences have been recorded in the balance sheet.

Goodwill

Under International Accounting Standards, goodwill arising from business acquisitions was capitalised by Astra and amortised over the estimated useful life. Goodwill arising from business acquisitions prior to 1998 is eliminated directly against reserves by Zeneca, as allowed under UK GAAP.

Restructuring costs

Certain costs incurred in connection with the Astra Merck restructuring recorded as liabilities on acquisition by Astra in 1998 have been charged as operating costs to comply with UK GAAP.

Deferred taxation

Deferred taxes recorded under the full liability method under Astra's accounting policy (in accordance with International Accounting Standards) have been restated to the partial liability method required under UK GAAP. Under the full liability method used, deferred taxes are calculated on the difference between the reported value and the tax value of all assets and liabilities using the respective country's enacted tax rate. Under the partial liability method, deferred taxes on temporary differences are recorded only to the extent that the effect is expected to be realised in the foreseeable future, normally no more than three to five years.

Short-term investments

Under International Accounting Standards Astra reflected unrealised losses on short-term investments in the profit and loss account and unrealised gains are not recorded. In accordance with UK GAAP unrealised gains and losses on short-term investments are reflected in the balance sheet.



31 Merger accounting (continued)

Group Profit and Loss Account

	3 months ended 31 March 1999					9 months ended 31 Dec 1999	1999
	Astra	IAS/UK GAAP adjustment	Astra UK GAAP*	Zeneca*	AstraZeneca	AstraZeneca	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
For the year ended 31 December 1999							
Turnover	2,345	–	2,345	2,311	13,789		18,445
Operating profit	546	17	563	407	1,776		2,746
<i>Operating profit before exceptional items</i>	546	17	563	407	2,938		3,908
<i>Exceptional items</i>	–	–	–	–	(1,162)		(1,162)
Share of operating profit/(loss) of joint ventures and associates	–	–	–	20	(27)		(7)
Profits less losses on sale or closure of operations	–	–	–	–	237		237
Merger costs	–	–	–	–	(1,013)		(1,013)
Net interest	8	13	21	(17)	(8)		(4)
Profit on ordinary activities before taxation	554	30	584	410	965		1,959
Taxation	(169)	(2)	(171)	(129)	(515)		(815)
Profit on ordinary activities after taxation	385	28	413	281	450		1,144

	3 months ended 31 March 1998					9 months ended 31 Dec 1998	1998
	Astra	IAS/UK GAAP adjustment	Astra UK GAAP*	Zeneca*	AstraZeneca	AstraZeneca	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
For the year ended 31 December 1998							
Turnover	7,199	(852)	6,347	9,055	15,402		
Operating profit	1,919	(596)	1,323	1,819	3,142		
<i>Operating profit before exceptional items</i>	1,828	(596)	1,232	1,819	3,051		
<i>Exceptional items</i>	91	–	91	–	91		
Share of operating profit of joint ventures and associates	–	536	536	3	539		
Profits less losses on sale or closure of operations	–	–	–	(46)	(46)		
Profits on sale of fixed assets	–	–	–	17	17		
Net interest	151	(45)	106	(59)	47		
Profit on ordinary activities before taxation	2,070	(105)	1,965	1,734	3,699		
Taxation	(584)	46	(538)	(548)	(1,086)		
Profit on ordinary activities after taxation	1,486	(59)	1,427	1,186	2,613		

* All Astra UK GAAP amounts relate to continuing operations. Of the Zeneca amounts, \$296m (1998 \$1,302m) of turnover and \$31m (1998 \$146m) of operating profit relate to discontinued operations.

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31 Merger accounting (continued)

Group Statement of Total Recognised Gains and Losses	1999	1998
	\$m	\$m
Profit for the period		
Astra to date of merger	413	1,427
Zeneca to date of merger	281	1,184
AstraZeneca from date of merger	449	-
Exchange and other adjustments		
Astra to date of merger	(167)	(238)
Zeneca to date of merger	(30)	57
AstraZeneca from date of merger	(433)	-
Total recognised gains and losses	513	2,430

Analysis of Net Assets

As at 31 March 1999	Astra	IAS/UK GAAP adjustment	Astra UK GAAP	Zeneca	AstraZeneca
	\$m	\$m	\$m	\$m	\$m
Fixed assets	4,943	45	4,988	4,394	9,382
Current assets	5,148	1	5,149	4,687	9,836
Total assets	10,091	46	10,137	9,081	19,218
Creditors due within one year	(2,039)	(376)	(2,415)	(3,322)	(5,737)
Creditors due after more than one year	(475)	-	(475)	(778)	(1,253)
Provisions for liabilities and charges	(628)	239	(389)	(629)	(1,018)
Net assets	6,949	(91)	6,858	4,352	11,210
Capital and reserves					
Shareholders' funds – equity interests	6,949	(91)	6,858	4,299	11,157
Minority equity interests	-	-	-	53	53
Shareholders' fund and minority interests	6,949	(91)	6,858	4,352	11,210

32 Post-retirement benefits

Pensions

The Company, and most of its subsidiaries, operate or participate in retirement plans which cover the majority of employees (including Directors) in the group. These plans are either defined contribution, where the level of company contribution is fixed at a set level or percentage of employees' pay, or defined benefit, where benefits are based on employees' years of service and final pensionable pay. Former Zeneca plans are, generally, funded plans which are effected through separate trustee-administered funds. The Swedish plan for salaried employees' is administered by Pritjänst AB, a joint company for Swedish industry, and benefit levels and actuarial assumptions are established by Försäkringsbolaget SPP. The pension cost for the group's main defined benefit plans is established in accordance with the advice of independent qualified actuaries based on valuations undertaken on varying dates.



32 Post-retirement benefits (continued)

With regard to the group's main UK defined benefit fund, the latest actuarial valuation was carried out at 31 March 1997 and the pension cost assessed using the projected unit credit method. The significant assumptions used in this valuation were that, against a background of long-term UK price inflation averaging 4% pa, investment returns would average 8.4% pa, salary increases 6% pa, and pension increases 3.75% pa. The asset valuation model assumes long-term dividend growth in UK and overseas equities of 1% pa and 2.5% pa respectively above the rate of inflation. The valuation took account of the consequences of the removal of UK dividend tax relief. The market value of the UK fund's assets at the valuation date was £1,745m, equivalent, after allowing for future increases in earnings and pensions, to 88% of the benefit obligation that had accrued to members at the valuation date. The group has increased its rate of contributions to the fund in accordance with the actuary's advice and taken other measures to address the deficit including a substantial one off contribution. The cost of the deficit is being charged in the financial statements as a level percentage of salaries over active members' remaining service lives. The actuary estimated that had the Minimum Funding Requirement basis applied at the time of the last valuation, the fund's solvency level would have been in excess of the required 100%.

Although full actuarial valuations are only undertaken every three years, an interim assessment by the actuary has indicated that were the actuarial valuation to be updated to reflect subsequent interest rates, stock market returns and fund performance (but without considering changes to the demographics of membership), the fund deficit would have increased. AstraZeneca's accounting policy, in accordance with UK GAAP, is to spread the cost of any deficit over active members' remaining service lives. The cost of the deficit, as currently foreseen, will not have a material impact on AstraZeneca's results of operations or financial position.

In total the group's main funded defined benefit plans (including the UK plans) held assets at their most recent valuation dates whose market values amounted to \$3,815m. After allowing for future increases in earnings and pensions, over 90% of the benefit obligation that had accrued to members at the valuation dates were covered by the actuarial value of the assets of the plans and by the value of provisions set aside in subsidiary companies' accounts at the same dates.

The total pension cost for the group for 1999 was \$298m (1998 \$265m, 1997 \$236m). In the group balance sheet at 31 December 1999, accrued pension costs amounted to \$44m (1998 \$37m) and were included in other creditors (Note 18); provisions for unfunded benefit obligations, included in provisions (Note 21), amounted to \$451m (1998 \$450m). Prepaid pension costs amounting to \$74m (1998 \$69m) were included in debtors (Note 15).

Post-retirement benefits other than pensions

In the US, and to a lesser extent in some other countries, AstraZeneca's employment practices include the provision of healthcare and life insurance benefits for retired employees. Some 6,600 retired employees and covered dependants currently benefit from these provisions and some 9,900 current employees will be eligible on retirement. AstraZeneca accrues for the present value of such retiree obligations over the working life of the employee.

The cost of post-retirement benefits other than pensions for the group in 1999 was \$21m (1998 \$22m, 1997 \$22m). Provisions for the benefit obligations at 31 December 1999 amounted to \$232m (1998 \$237m, 1997 \$232m). Other than this provision there were no plan assets at 31 December 1999.

33 Employee costs and share option plans for employees

Employee costs

The average number of people employed by the group in 1999 was 58,000 (1998 58,300, 1997 53,800) and the costs incurred during the year in respect of these employees were:

	1999	1998	1997
	\$m	\$m	\$m
Salaries	2,849	2,810	2,353
Social security costs	479	480	472
Pension costs	298	265	236
Other employment costs	98	115	110
	3,724	3,670	3,171

Employee costs above do not include severance costs.

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Notes relating to the financial statements

33 Employee costs and share option plans for employees (continued)

The Directors believe that, together with the basic salary system, the group's employee incentive schemes should provide a competitive and market-related package 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 UK, Swedish and US schemes are described below; other arrangements apply elsewhere. All of the existing schemes (both former Zeneca and former Astra schemes) are being reviewed and proposals for revised schemes, for the new AstraZeneca group, are being developed.

The Zeneca Employee Performance Bonus Plan

A discretionary bonus scheme based on trading results, related to the achievement of performance targets at both individual business unit and overall levels.

Employees are offered the opportunity to take any bonus that may be payable under the scheme in the form of cash or of Ordinary Shares in the Company through a share retention scheme.

The Zeneca Executive Performance Bonus Plan

A similar bonus scheme and share retention scheme for senior employees who do not participate in the Zeneca Employee Performance Bonus Plan. Bonuses for senior employees, as well as reflecting corporate and business performance, can also be affected (both up and down) by individual performance.

The Zeneca 1994 Executive Share Option Scheme

Options to subscribe for Ordinary Shares in the Company may be granted to selected qualifying employees upon the recommendation of the Remuneration Committee.

The Zeneca Savings-Related Share Option Scheme

Employees may make regular monthly savings contributions over a three or five year period and may apply for options to acquire AstraZeneca shares. Further details are set out below.

The Astra Global Profit-Sharing Scheme

Astra introduced a profit-sharing plan in 1984 for all employees. The size of allocations is linked to Astra's return on capital employed, but may not exceed one-third of the year's dividend payout. In 1999 the payment to former Astra employees totalled \$46m.

The Astra Shareholder Value Incentive Plan

A stock option programme established in 1996 in respect of a limited number of Astra employees in key positions. Allocations are made annually and linked to the fulfilment of group-wide targets and increases in the group's economic value added.

US Schemes

In the US, there are four senior staff incentive schemes, under which either AstraZeneca ADSs or stock appreciation rights related to AstraZeneca ADSs are awarded to participants. There are currently approximately 160 participants in these schemes. AstraZeneca ADSs necessary to satisfy the awards under these schemes are purchased on the open market, and no subscriptions for new Ordinary Shares have been involved.

Share Option Schemes

At 31 December 1999 there were options outstanding under the Zeneca 1993 Senior Staff Share Option Scheme, the Zeneca 1994 Executive Share Option Scheme, the Zeneca Savings-Related Share Option Scheme and the Astra Shareholder Value Incentive Plan.

(1) Summary of the Zeneca 1993 Senior Staff Share Option Scheme

The Zeneca 1993 Senior Staff Share Option Scheme was introduced at the time of demerger in 1993. The last date for grant of options was 19 May 1994 and the scheme has been replaced by the Zeneca 1994 Executive Share Option Scheme.

(2) Summary of the Zeneca 1994 Executive Share Option Scheme

Eligibility

Employees required to devote substantially the whole of their time to the business of AstraZeneca, and not within two years of their contractual retirement ages, are eligible to participate at the discretion of the Directors.



33 Employee costs and share option plans for employees (continued)

Grant of Options

Options may be granted 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 options may be granted later than ten years after the approval of the Scheme by shareholders.

The grant of options will be supervised by the Remuneration Committee which is comprised wholly of Non-Executive Directors. No payment will be required for the grant of an option. Options are not transferable.

Acquisition Price

The price per Ordinary Share payable upon the exercise of an option will not be less than the higher of:

- (a) the arithmetical average of the middle-market quotations for an Ordinary Share on the London Stock Exchange on three consecutive dealing days immediately before options are granted (or such other day or days as may be agreed with the Inland Revenue); and
- (b) the nominal value of an Ordinary Share (unless the option relates only to existing shares).

Exercise of Options

An option will normally be exercisable between three and ten years following its grant provided the relevant performance condition has been satisfied. Options may be satisfied by the issue of new shares or by existing shares purchased in the market.

An option will not normally be exercisable unless a performance condition set by the Remuneration Committee has been satisfied. The performance condition is that earnings per share must grow by at least the increase in the UK Retail Price Index over three years plus 3% per annum. Satisfaction of this condition would be tested annually by reference to the audited financial statements. Once the condition is satisfied in respect of any rolling three year period beginning no earlier than the end of the financial year prior to the grant of the option then it need not be satisfied again in respect of that option. The Remuneration Committee will review the performance criterion at intervals to ensure its ongoing appropriateness.

Options normally lapse on cessation of employment. Exercise is, however, permitted for a limited period (irrespective of the period for which the option has been held or whether the performance condition has been satisfied) following cessation of employment either in certain compassionate circumstances or at the discretion of the Directors, and on an amalgamation, take-over or winding-up of the Company.

(3) Summary of the Zeneca Savings-Related Share Option Scheme (the 'SAYE Scheme')

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 ten years after the approval of the SAYE Scheme by shareholders.

Options may only be granted to employees who enter into UK Inland Revenue 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 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 SAYE Scheme may not exceed £250 or such lower amounts as may be determined by the Directors.

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33 Employee costs and share option plans for employees (continued)

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 per cent 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 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 may be satisfied by the issue of new shares or by existing shares purchased in the market.

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.

(4) Summary of the Astra Shareholder Value Incentive Plan ('ASVIP')

In 1996 Astra established a stock option programme, the ASVIP, for some 100 Astra employees in key positions in research, marketing, production and central functions. Allocations through the programme are intended to be made on a yearly basis.

The option allocation is coupled to the fulfilment of a target related to Astra's growth in value during the year. Growth in value is defined as an increase in Astra's economic value added (EVA[®])*. Employees in the programme are classified into four categories, with a different number of shares being allocated to employees within each of the respective categories.

EVA is calculated as consolidated earnings after tax, with certain adjustments. These earnings are charged with a capital cost for shareholders' equity and borrowed capital. The capital cost consists of a weighted average of calculated interest on loans and a calculated required rate of return for shareholders.

On completion of the merger with Zeneca, options in Astra shares granted under this scheme were replaced by options to acquire a number of AstraZeneca shares based on the exchange ratio used in the exchange offers employed to effect the AstraZeneca merger. The ratio of AstraZeneca options granted in respect of former Astra options was 0.5045 AstraZeneca options for each Astra option held and the table opposite has been restated throughout accordingly.

The exercise period of the options is seven years. Valuation at the time of allocation was made on strictly commercial terms and will correspond to the value of options purchased on the market for hedging purposes.

*EVA[®] is a registered trademark of Stern Stewart & Co., USA



33 Employee costs and share option plans for employees (continued)

	1994 Scheme		SAYE Scheme		ASVIP	
	Options '000	WAEP* pence	Options '000	WAEP* pence	Shares under option '000	WAEP* SEK
Movements during 1997						
Options granted	677	1801	917	1759	214	411
Options exercised	799	864	66	801	Nil	
Options forfeited	32	1740	191	952	Nil	
Options lapsed	Nil		Nil		Nil	
Weighted average fair value of options granted during the year		536		604		117
At 31 December 1997						
Options outstanding	2,633	1289	5,341	1114	905	330
Movements during 1998						
Options granted	612	2433	803	2146	344	442
Options exercised	564	971	67	874	Nil	
Options forfeited	17	1495	137	1276	Nil	
Options lapsed	Nil		Nil		Nil	
Weighted average fair value of options granted during the year		569		540		117
At 31 December 1998						
Options outstanding	2,664	1618	5,940	1252	1,249	361
Movements during 1999						
Options granted	810	2584	1,211	2264	Nil	
Options exercised	432	1205	2,376	860	Nil	
Options forfeited	41	1893	387	1665	Nil	
Options lapsed	Nil		Nil		Nil	
Weighted average fair value of options granted during the year		827		856		
At 31 December 1999						
Options outstanding	3,001	1934	4,388	1708	1,249	361
Range of exercise prices	826p to 2749p		754p to 2264p		298SEK to 442SEK	
Weighted average remaining contractual life	2,672 days		848 days		1,625 days	
Options exercisable	1,292	1419	218	1008	1,249	361

*Weighted Average Exercise Price

In addition to the schemes disclosed above at 31 December 1999 there were 110,000 options outstanding issued under the Zeneca 1993 Scheme with a WAEP of 682p.

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34 Directors' interests in shares and debentures

The interests at 31 December 1999 or on date of resignation of the persons who on that date were Directors (including the interests of their families) in shares and debentures of the Company and its subsidiaries are shown below, all of which were beneficial.

	Interest in Ordinary Shares, including shares held in trust, at 1 January 1999 or appointment date	Shares held in trust at 1 January 1999 or appointment date	Net shares acquired	Interest in Ordinary Shares, including shares held in trust, at 31 December 1999 or resignation date	Shares held in trust at 31 December 1999 or resignation date
Percy Barnevik	–	–	100,000	100,000	–
Sir David Barnes	208,967	22,090	5,609	214,576	19,026
Håkan Mogren	55,740	–	–	55,740	–
Tom McKillop	60,404	23,202	4,772	65,176	18,414
Michael Pragnell	7,830	7,330	1,564	9,394	5,404
Åke Stavling	537	–	–	537	–
Jonathan Symonds	3,266	316	2,986	6,252	3,302
Claes Wilhelmsson	18,349	–	–	18,349	–
Sir Peter Bonfield	500	–	–	500	–
Karl von der Heyden	10,000	–	–	10,000	–
Erna Möller	2,118	–	–	2,118	–
Dame Bridget Ogilvie	500	–	–	500	–
Lars Ramqvist	–	–	500	500	–
Marcus Wallenberg	74,504	–	–	74,504	–
Former directors					
Sir Sydney Lipworth	5,000	–	–	5,000	–
Peter Doyle	47,776	12,346	–	47,776	12,346
Alan Pink	87,324	19,294	–	87,324	19,294
Sir Richard Greenbury	500	–	–	500	–
Frank Meysman	500	–	–	500	–
Sir Jeremy Morse	2,387	–	–	2,387	–

Shares held in trust above are long-term incentive bonus shares appropriated under the Zeneca Executive Performance Bonus Plan which have not yet been released. During the period 1 January 2000 to 23 February 2000 there was no change in the interests of Directors shown in this note. In the event that Ordinary Shares are appropriated in 2000 to Directors pursuant to the Executive Performance Bonus Plan in respect of the year to 31 December 1999 the Directors would have an interest in such appropriated shares.

The interests of Directors in options to subscribe for Ordinary Shares of the Company, which include options granted under the Savings Related Share Option Scheme, together with options granted and exercised during the year are included in the following table.



34 Directors' interests in shares and debentures (continued)

		No. of shares under option	Exercise price per share ⁺	Market price at date of exercise	First date exercisable*	Last date exercisable*
Sir David Barnes	At 1 Jan 1999	145,690	983p		28.05.95	28.03.06
	Exercised	1,372	754p	2834p	01.11.99	30.04.00
	Exercised	287	1357p	2845p	01.12.99	31.05.00
	At 31 Dec 1999	144,031	984p		28.05.95	28.03.06
Håkan Mogren	At date of appointment	–	–		–	–
	Granted	49,108	2749p		13.12.02	12.12.09
	At 31 Dec 1999	49,108	2749p		13.12.02	12.12.09
Tom McKillop	At 1 Jan 1999	115,188	1439p		05.04.97	25.03.08
	Granted	28,421	2674p		25.03.99	24.03.09
	Granted	447	2264p		01.12.04	31.05.05
	Exercised	1,372	754p	2885p	01.11.99	30.04.00
	At 31 Dec 1999	142,684	1694p		05.04.97	24.03.09
Michael Pragnell	At 1 Jan 1999	102,770	1301p		06.04.98	25.03.08
	Granted	3,739	2674p		25.03.02	24.03.09
	At 31 Dec 1999	106,509	1349p		06.04.98	24.03.09
Åke Stavling	At date of appointment	–	–		–	–
	Granted	30,701	2508p		26.05.02	25.05.09
	At 31 Dec 1999	30,701	2508p		26.05.02	25.05.09
Jonathan Symonds	At 1 Jan 1999	44,064	2158p		01.10.00	19.08.08
	Granted	29,342	2505p		25.08.02	24.08.09
	Granted	298	2264p		01.12.04	31.05.05
	At 31 Dec 1999	73,704	2296p		01.10.00	24.08.09
Claes Wilhelmsson	At date of appointment	–	–		–	–
	Granted	33,492	2508p		26.05.02	25.05.09
	At 31 Dec 1999	33,492	2508p		26.05.02	25.05.09
Peter Doyle	At 1 Jan 1999	102,387	1443p		27.03.98	19.08.08
	At resignation date	102,387	1443p		27.03.98	19.08.08
Alan Pink	At 1 Jan 1999	66,594	1491p		27.03.98	13.08.07
	At resignation date	66,594	1491p		27.03.98	13.08.07

⁺ Exercise prices at 1 January and 31 December are weighted averages.

* First and last exercise dates of groups of options, within which periods there are shorter exercise periods.

In addition to the above the following Directors held options under the Astra Shareholder Value Incentive Plan which were converted into options over AstraZeneca shares on completion of the merger based on an exchange ratio of 0.5045 AstraZeneca options for each Astra option held. None of these options were exercised during 1999 and no further options have been or will be granted under the scheme.

Håkan Mogren	At date of appointment	37,480	359SEK		06.04.99	23.01.06
	At 31 Dec 1999	37,480	359SEK		06.04.99	23.01.06
Åke Stavling	At date of appointment	16,193	369SEK		06.04.99	23.01.06
	At 31 Dec 1999	16,193	369SEK		06.04.99	23.01.06
Claes Wilhelmsson	At date of appointment	17,168	365SEK		06.04.99	23.01.06
	At 31 Dec 1999	17,168	365SEK		06.04.99	23.01.06

The aggregate amount of gains made by Directors on the exercise of share options during the year amounted to \$0.1m (1998 \$nil, 1997 \$11m) and the gains made by the highest paid director were \$47,000 (1998 \$nil, 1997 \$2.5m). The market price of the shares at 31 December 1999 was 2568p and the range during 1999 was 2208p to 3037p. The Register of Directors' Interests (which is open to inspection) contains full details of Directors' shareholdings and options to subscribe.

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35 Emoluments of Directors

The aggregate remuneration, excluding pension contributions, paid to or accrued for all Directors and officers of the Company for services in all capacities during the year ended 31 December 1999 was \$14m (including \$300,000 to the Chairman). Remuneration of individual Directors was as follows:

	Salary and fees	Bonuses*	Taxable benefits	Other	Total 1999	Total 1998	Total 1997
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Percy Barnevik (from 6 April 1999)	300	-	-	-	300	-	-
Sir David Barnes	823	373	21	-	1,217	1,426	1,057
Håkan Mogren (from 6 April 1999)	839	635	26	-	1,500	-	-
Tom McKillop	1,154	566	21	-	1,741	848	705
Michael Pragnell	654	79	34	104†	871	637	508
Åke Stavling (from 6 April 1999)	471	329	42	-	842	-	-
Jonathan Symonds	667	338	28	116†	1,149	734	148
Claes Wilhelmsson (from 6 April 1999)	514	359	12	-	885	-	-
Sir Peter Bonfield	57	-	-	-	57	45	44
Karl von der Heyden	61	-	-	-	61	12	-
Erna Möller (from 6 April 1999)	46	-	-	-	46	-	-
Dame Bridget Ogilvie	57	-	-	-	57	45	44
Lars Ramqvist (from 6 April 1999)	49	-	-	-	49	-	-
Marcus Wallenberg (from 6 April 1999)	46	-	-	-	46	-	-
Former Directors							
Sir Sydney Lipworth	67	-	9	-	76	281	272
Peter Doyle	158	223	5	602#	988	740	593
Alan Pink	175	73	5	-	253	853	646
Sir Richard Greenbury	20	-	-	-	20	53	52
Frank Meysman	17	-	-	-	17	45	44
Sir Jeremy Morse	20	-	-	-	20	50	44
Others						22	813
	6,195	2,975	203	822	10,195	5,791	4,970

* The figures stated above include the cost to the company of providing the matching contribution of shares in respect of that part of the bonus which is to be taken in shares by each Director. All such shares are held in trust and will be released to each Director upon fulfillment of the conditions and under the terms of the plan described on page 53.

† Payments for pension related tax liabilities.

Compensation for loss of office.

Emoluments shown are for the Directors' services as a Director of AstraZeneca PLC, formerly Zeneca Group PLC. Therefore the emoluments of former Astra Directors and employees, who are now Directors of AstraZeneca, (i.e. Håkan Mogren, Åke Stavling, Claes Wilhelmsson, Erna Möller, Lars Ramqvist and Marcus Wallenberg) are for the period from their appointment as Directors of AstraZeneca PLC (6 April 1999) to 31 December 1999.

Some Directors and officers were also granted options to subscribe for Ordinary Shares under the group's share option schemes. Details of share options granted to, and exercised by, Directors and the aggregate of gains realised on exercised options in the year are given on page 103.

In accordance with English law and practice there are written conditions of employment between AstraZeneca and all its monthly salaried employees. Contracts of employment of Directors and officers are subject to termination on reaching the age of 62 years (unless extended by mutual consent) or on notice periods of up to two years being given by AstraZeneca or such employee.

No Director or officer has a family relationship with any other Director or officer.



35 Emoluments of Directors (continued)

Transactions with Directors

During the year Håkan Mogren purchased a flat from the Company for approximately \$717,000 and four Directors purchased cars and/or furniture for a total consideration of \$140,000. All transactions were subjected to independent valuations and carried out at fair market values.

The remuneration of the Executive Directors is determined by the Remuneration Committee comprised entirely of Non-Executive Directors and chaired by Lars Ramqvist. Remuneration above consists of annual salary, health and car benefits, a bonus scheme and an executive share option scheme. Salaries are reviewed each year in the light of comparison with other companies, the performance of the Company and individual experience and contribution. Further details are provided in the Report of the Board on Remuneration of Directors on pages 52 to 54.

The Non-Executive Directors were not eligible for performance related bonuses or share options and no pension contributions were made on their behalf.

In common with other senior employees in the UK who are members of the main UK Pension Fund, the normal pension age for each Director is 62. However, their accrued pension is available from age 60 without any actuarial reduction. In addition, the accrued pension is available, unreduced, from age 50 if the Company consents to a request for early retirement.

Directors' Pension Entitlement (per annum)	Sir David Barnes	Peter Doyle	Tom McKillop	Alan Pink	Håkan Mogren	Åke Stavling	Claes Wilhelmsson
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000

Defined Benefit Arrangements

1. Accrued pension at 1 January 1999 or date of appointment	705	421	372	427	903	212	360
2. Increase in accrued pension during year as a result of inflation	–	10*	4	10*	–	–	–
3. Adjustment to accrued pension as a result of salary increase relative to inflation	–	(2)	244	(2)	–	–	–
4. Increase in accrued pension as a result of additional service	–	5	24	4	25	20	2
5. Accrued pension at 31 December 1999 or date of resignation	705	434	644	439	928†	232†	362†
6. Employee contributions during year	–	6	44	7	–	–	–
7. Age at 31 December 1999 or date of resignation (years)	63 ⁹ / ₁₂	60 ⁶ / ₁₂	56 ⁹ / ₁₂	61 ¹ / ₁₂	55 ³ / ₁₂	54 ¹¹ / ₁₂	60 ⁹ / ₁₂
8. Pensionable service (years)	41	35 ⁷ / ₁₂	30 ³ / ₁₂	36 ⁶ / ₁₂	27 ³ / ₁₂	26 ¹¹ / ₁₂	32 ⁹ / ₁₂

* Includes late retirement uplift

† Accrued pension payable between the age of 60 and 65. Once 65 the pension payable is reduced by ²/₇ths (or 28.6%) from the figures shown.

Michael Pragnell Jonathan Symonds

\$'000 \$'000

Money Purchase Arrangements

Company contributions paid	162	223
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The contributions and accrued benefits shown above are paid in pounds sterling or Swedish kronor and have been translated into US dollars for convenience purposes at rates of \$1=£0.6157 and \$1=SEK 8.2189 respectively.

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Notes relating to the financial statements

35 Emoluments of Directors (continued)

Former Zeneca Directors pension entitlement

On death in retirement, the accrued pension shown 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 to Inland Revenue limits, in return for an adjustment to their own pension of equivalent actuarial value. Pensions are also payable to dependant children. In the event of a senior employee becoming incapacitated from performing his work then a pension is payable immediately as if such person had reached normal retirement age, based on current pensionable salary. In the event of death prior to retirement, dependants are entitled to a pension of two thirds of the pension that would have been earned had such person remained in service to age 62 plus a capital sum of four times pensionable pay. Pensions in payment are increased annually in line with inflation, as measured by the Retail Price Index, up to a maximum of 5%.

Former Astra Directors pension entitlement

Former Astra Directors are entitled to a total pension of 70% of pensionable salary from age 60 to 65 and of 50% of such earnings from age 65. As a result the accrued pensions shown above are only payable from age 60 to age 65 after which they will be reduced by $\frac{2}{7}$ ths of the amounts shown. Paid in pension capital may also be used in the event of retirement or termination before the age of 60. The pensionable salary is adjusted yearly in accordance with the consumer price index. In the event of long term illness then a pension is payable immediately as if such person had reached the normal retirement age, of 70% of current pensionable salary. On death in retirement the accrued pension shown is payable to a surviving spouse or other dependant. In the event of death prior to retirement the accrued pension shown is payable to a surviving spouse or other dependant plus a capital sum of three times pensionable salary less \$100,000 if married or two times pensionable salary less \$100,000 if not.

36 Assets pledged, commitments and contingent liabilities

	1999	1998	1997
	\$m	\$m	\$m
Assets pledged			
Mortgages and other assets pledged	47	47	132
Commitments			
Contracts placed for future capital expenditure not provided for in these accounts	383	411	396

Included in the above total are contracts related to certain product purchase and licence agreements with deferred consideration obligations, 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 sales levels achieved. 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.



36 Assets pledged, commitments and contingent liabilities (continued)

Commitments

Commencing in 1999, AstraZeneca is required to pay approximately \$800m over at least a five-year period, under the terms of agreement with Schering-Plough. With effect from 1 January 1999, in connection with this agreement, AstraZeneca obtained a stand-by letter of credit in the amount of \$608m. This letter of credit is collateralised by high-grade government securities which are not available to AstraZeneca to the extent of the outstanding balance of the letter of credit. The amount outstanding under the letter of credit is automatically reduced with each payment made by AstraZeneca to Schering-Plough. Under the terms of this agreement AstraZeneca reacquired the rights to market omeprazole under the *Losec* trade mark and felodipine under the *Prevex* and *Perfudal* trade marks in Italy and Spain. Payments under this agreement for 1999 totalled approximately \$276m.

Pursuant to the restructuring of the joint venture with Merck & Co., Inc. (see Note 3), AstraZeneca is obliged to make certain contingent payments to Merck based on sales of certain current and pipeline AstraZeneca products until at least 2008. AstraZeneca is also required to make certain payments to Merck in the form of partnership distributions, including a priority return and certain variable returns which are based upon sales of certain other AstraZeneca products in the US.

As part of the Astra Merck restructuring and as a result of the merger of Astra and Zeneca, an option (the 'First Option') exists under which Merck has the right to require that AstraZeneca purchases Merck's rights to all products other than omeprazole and esomeprazole (the 'First Option assets') in 2008. If Merck does not exercise the First Option in 2008, then AstraZeneca may exercise the First Option in 2010. In the event the First Option is exercised, AstraZeneca shall pay compensation to Merck based on a multiple of an average of the three preceding years' pre-tax payments from AstraZeneca to Merck for all products except for omeprazole and esomeprazole, subject to a minimum of at least \$4.4bn.

In addition, AstraZeneca has an option to purchase Merck's rights to payments in respect of omeprazole and esomeprazole two years after the First Option is exercised (the 'Second Option'). The exercise price for the Second Option will be the fair value of such rights as determined at the time of such exercise.

If neither the First Option nor the Second Option is exercised by AstraZeneca or Merck, the license agreement will continue indefinitely with respect to the compounds still subject to the license agreement at the time of the merger, the value of which license rights will diminish over time.

In connection with the consummation of the merger, AstraZeneca was also required, under the Astra Merck restructuring agreements, to pay Merck a lump sum based on Astra's and Zeneca's respective pharmaceutical research and development expenditure over a 12 month period. In April 1999, AstraZeneca paid Merck \$713m to settle this obligation but Merck disputed the basis of calculation and claimed a payment some \$110m higher. The matter went to arbitration and in February 2000 a ruling in the dispute was delivered under which AstraZeneca has paid Merck a further \$94m, including interest. This amount, together with the original \$713m and related legal costs, has been charged as part of the exceptional merger costs in the 1999 accounts.

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36 Assets pledged, commitments and contingent liabilities (continued)

Environmental

AstraZeneca has environmental liabilities at some currently or formerly owned, leased and third party sites in the USA. AstraZeneca, or its indemnitees, have been named under US legislation (the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended) as potentially responsible parties (PRP) in respect of 36 sites (although AstraZeneca expects to be indemnified against liabilities associated with seven of these sites by the seller of the businesses associated with such sites) and, where appropriate, actively participates in or monitors the clean-up activities at sites in respect of which it is a PRP. Stauffer Management Company, a subsidiary of AstraZeneca established in 1987 to own and manage certain assets of Stauffer Chemical Company which was acquired that year, has identified 41 sites (including 22 for which AstraZeneca has been named a PRP) for which it may have responsibility that will, in aggregate, require significant expenditure on clean-up and monitoring.

The requirement in the future for AstraZeneca ultimately to take action at its cost to correct the effects on the environment of prior disposal or release of chemical substances is inherently difficult to estimate. AstraZeneca has provisions at 31 December 1999 in respect of such costs in accordance with the accounting policies on page 63. Although there can be no assurance, management believes that, taking account of these provisions, the costs of addressing currently identified environmental obligations, as AstraZeneca currently views those obligations, is unlikely to impair materially AstraZeneca's financial position. Such contingent costs, to the extent that they exceed applicable provisions, could have a material adverse effect on AstraZeneca's results of operations for the relevant period.

Legal Proceedings

Losec (omeprazole)

In June 1997, the German federal patent court declared invalid a previously granted supplementary protection certificate which extended protection for omeprazole, the active ingredient contained in *Losec*, from 1999 to 2003. The decision was appealed and on 1 February 2000, the German supreme court decided to refer the case to the European Court of Justice for a preliminary ruling. The case does not involve any financial claims.

During 1999, Astra filed a number of patent infringement actions in Germany against companies launching generic capsule versions of omeprazole in Germany. AstraZeneca maintains that these companies' actions infringe AstraZeneca's formulation patent for omeprazole, which expires in Germany in 2007. In addition, AstraZeneca maintains that such actions infringe AstraZeneca's supplementary protection certificate for the omeprazole substance patent. These proceedings do not currently include claims for monetary amounts. In one case, a preliminary injunction has been granted preventing ratiopharm GmbH from marketing its product until the main action for patent infringement has been decided. If the final decision goes against AstraZeneca, ratiopharm may claim damages for lost sales due to the preliminary injunction.

In 1998, Astra filed suits in the USA against Andrx Pharmaceuticals, Inc. and Genpharm, Inc. The law suits followed the filing of abbreviated new drug applications by Andrx and Genpharm with the US Food and Drug Administration concerning the two companies' intention to market generic omeprazole products in the USA. The suits are continuing. The basis of the proceedings is that the actions of Andrx and Genpharm infringe several patents related to *Prilosec/Losec*. In AstraZeneca's opinion, these patents provide protection until at least 2001. During 1999, Astra also filed suits against Kremers Urban Development Company and Schwarz Pharma, Inc., and against Cheminor Drugs, Ltd., Reddy-Cheminor, Inc. and Schein Pharmaceutical, Inc. in the USA on similar grounds.

In May 1999, the Federal Court of Australia in Sydney handed down a patent ruling pertaining to omeprazole in connection with a dispute between Astra and the generic company, Alphapharm Pty Ltd. The court established that the formulation used by Alphapharm in its generic omeprazole infringed the patented formulation technology of Astra. However, the court also declared that, under Australian patent law, Astra's formulation patent was invalid. The judgement is now under appeal.



36 Assets pledged, commitments and contingent liabilities (continued)

Nolvadex (tamoxifen)

In January 1996, Zeneca Limited received a letter from Mylan Pharmaceuticals Inc. stating that Mylan had filed an abbreviated new drug application with the FDA seeking permission to market tamoxifen citrate in the USA and asserting that Zeneca's patent for tamoxifen citrate is invalid and unenforceable. Zeneca disputes Mylan's position and in February 1996 filed an action against Mylan in the Federal District Court for the Western District of Pennsylvania. Among other things, Mylan asserted affirmative defences and counterclaims alleging patent misuse, unclean hands and collateral estoppel (based on Zeneca's settlement of an earlier patent dispute in 1993), which Zeneca denies. The case has been suspended pending the resolution of the Pharmachemie case, described below.

Notification was received by Zeneca Limited in February 1996 that Pharmachemie BV had filed an abbreviated new drug application with the FDA to market tamoxifen citrate in the USA and asserting that Zeneca's US patent for tamoxifen citrate is invalid and unenforceable. Zeneca disputes Pharmachemie's position and in March 1996 filed an action against Pharmachemie in the Federal District Court for the District of Maryland. This matter was transferred to the US District Court for the District of Massachusetts. After the close of discovery in this case, Zeneca filed a motion for partial summary judgement on Pharmachemie's affirmative defences of patent misuse, unclean hands and collateral estoppel (similar to those asserted by Mylan). In February 1999, the court issued an order granting the motion and dismissing such affirmative defences with prejudice.

In September 1999, a jury trial of this case commenced in Boston. Pharmachemie asserted that the tamoxifen patent was invalid for failure to comply with the "best mode" and "enablement" requirements of the US patent statute. It also asserted that the patent was unenforceable due to "inequitable conduct" in the prosecution of the patent. Pharmachemie withdrew one of its unenforceability defences before the trial began and dropped its "enablement" defence prior to the close of evidence. Following several weeks of trial, the District Court ruled from the bench in Zeneca's favour on one of Pharmachemie's inequitable conduct defences. It also indicated that it was reserving judgement on the sole remaining inequitable conduct defence and exercising its discretion to decide the issue without submitting it to the jury for an advisory fact-finding. Pharmachemie's "best mode" defence thus became the sole issue submitted to the jury.

In November 1999, the jury returned a verdict for Zeneca, rejecting Pharmachemie's "best mode" defence. The District Court has yet to rule on the remaining inequitable conduct issue and has not yet entered judgement.

Diprivan (propofol)

AstraZeneca's new formulation of *Diprivan* (propofol) containing the antimicrobial agent, disodium edetate, has patent protection in the USA expiring in March 2015. In 1998, notices were received by Zeneca Limited that GensiaSicor Pharmaceuticals, Inc. had submitted a propofol product that contained no antimicrobial agent, and a propofol product that contained an antimicrobial agent different from that contained in new formulation *Diprivan*, for FDA approval. Zeneca Inc. filed with the FDA a "Citizens Petition" asking the FDA to withdraw its approval for the formulation of *Diprivan* that did not contain the antimicrobial agent used by Zeneca and the FDA granted this petition on 10 December 1998. Zeneca also petitioned the FDA not to approve any generic version of propofol which (i) does not contain any antimicrobial agent and (ii) contains any antimicrobial agent other than the one used in *Diprivan*, without adequate clinical and scientific studies to support the product's safety. On 4 January 1999, Zeneca learned that this petition was denied and that the FDA had granted approval to GensiaSicor's abbreviated new drug application for a propofol product containing the antimicrobial agent, sodium metabisulfite. AstraZeneca does not agree with the FDA's decision and on 5 February 1999 Zeneca Inc. filed a lawsuit in the US District Court for the District of Maryland seeking a preliminary and permanent injunction enjoining (i) the FDA's approval of GensiaSicor's ANDA for a propofol product that contains the antimicrobial, sodium metabisulfite, and (ii) the FDA's approval of GensiaSicor's propofol product until AstraZeneca's market exclusivity terminated on 11 June 1999. Shortly after Zeneca filed the action against the FDA, GensiaSicor intervened. In March 1999, the District Court denied Zeneca's motion for preliminary injunction. Shortly thereafter, Zeneca filed a motion for summary judgement and the FDA and GensiaSicor filed cross-motions for summary judgement. In August 1999, the District Court denied Zeneca's motion for summary judgement and granted the FDA's and GensiaSicor's cross-motions for summary judgement and entered judgement in their favour. Zeneca has appealed against the District Court's decision.

Financial Statements

Notes relating to the financial statements

36 Assets pledged, commitments and contingent liabilities (continued)

Retail pharmacies'/drug purchasers' actions

Since October 1993, several thousand retail pharmacies and certain retail drug purchasers have commenced purported class actions and individual actions in various federal and state courts throughout the USA alleging that, with respect to brand name prescription drugs, manufacturers and wholesalers engaged in discriminatory pricing practices, discriminatory discounting and rebate practices, and/or conspired with one another to fix prices and artificially maintain high prices to the plaintiffs in restraint of trade and commerce. More than 20 brand name prescription drug manufacturers and eight wholesalers have been named defendants in some or all of these suits.

Zeneca Inc. was named a defendant in more than 140 separate complaints, including a consolidated action on behalf of a class of retail pharmacies now pending in the federal court of Chicago, Illinois (in November 1994, the federal court in Chicago certified this class); four actions on behalf of purported classes of retail pharmacies pending in state court in San Francisco, California; one action in an Alabama state court; one purported class action in a Wisconsin state court; one purported class action in a Minnesota state court; an individual action in state court in Mississippi; and fourteen purported class actions on behalf of consumers in Alabama, Arizona, California, Florida, Kansas, Maine, Michigan, Minnesota, New York, North Carolina, Tennessee, Washington, Washington DC, and Wisconsin state courts. The Alabama action purports to bring claims on behalf of consumers from the following states: Kansas, Maine, Michigan, Minnesota, Washington DC, Mississippi, New Mexico, North Dakota, South Dakota and West Virginia. A second Tennessee action brought in 1998 asserts claims on behalf of consumers of Tennessee, Alabama, Arizona, Florida, Kansas, Maine, Michigan, Minnesota, New Mexico, North Carolina, North Dakota, South Dakota, West Virginia and Wisconsin. During 1999, four new consumer class actions were filed in New Mexico, North Dakota, South Dakota and West Virginia. Classes have been certified in the California retailer and consumer actions and the 1998 Tennessee action. The actions in federal court generally allege violations of Section 1 of the Sherman Act, and in some cases, violations of Section 2(a) and Section 2(d) of the Robinson-Patman Act. The actions in California state court allege violations of the California Unfair Practices Act, the Cartwright Act and the Unfair Competition Act. The state cases allege violations of the respective state statutes analogous to the federal anti-trust and/or unfair competition laws. The complaints generally seek injunctive relief barring the allegedly unlawful conduct, and unspecified damages which would be trebled under applicable law. The complaints also seek costs, interest and reasonable attorney's fees.

Zeneca entered into a Settlement Agreement with the retail class plaintiffs whose anti-trust claims were consolidated in a federal multi-district litigation proceeding pending in the Northern District of Illinois. Zeneca has also reached settlements with numerous independent and chain pharmacies that opted out of the federal class action, although there are still actions brought by certain chain and independent pharmacies pending in the federal court of Chicago, Illinois. Zeneca has also settled the Minnesota and Wisconsin retail cases as well as all the consumer cases, except for Alabama, California, and the 1998 Tennessee action, and the four consumer cases filed in 1999. Zeneca has consistently denied liability and continues to believe it has meritorious defences to all of these claims. However, it believes that entering into these settlements is the prudent course of action given the inherent risks and costs of litigation and to avoid further business disruption.

CERCLA

AstraZeneca is subject to a number of environmental litigation proceedings in the USA. In particular, in 1990, the US and State of California Trustees filed an action under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, in the US District Court for the Central District of California against defendants including Stauffer Management Company (SMC), Montrose Chemical Corporation of California and several other AstraZeneca-related entities alleging DDT related natural resource damage near two ocean dump sites, the Los Angeles/Long Beach Harbors and the Palos Verdes Shelf. Rhône-Poulenc Inc., an indemnitee of SMC, was added as a defendant in 1991. The source of alleged DDT release is the Montrose plant in Torrance, California. Montrose conducted operations at the facility from 1947 until 1982 during which time the property was owned by Stauffer Chemical Company but is currently owned by a subsidiary of SMC. The plaintiffs are seeking recovery for alleged damages to natural resources as well as a declaration of liability for past and future response costs with respect to the former Montrose plant site and the Palos Verdes Shelf. The defendants are opposing this amendment. The plaintiffs are claiming \$482 million in natural resource damages and response costs with respect to the Palos Verdes Shelf but AstraZeneca does not believe such claims are supportable. The AstraZeneca entities have moved for summary judgement in their favour on the natural resource damage claims. The government plaintiffs are opposing this motion and have cross moved for partial summary judgement on such claims. The government plaintiffs are also moving for a summary judgement that Montrose, Rhône-Poulenc and the AstraZeneca entities are liable for response costs at the Torrance plant site and off-site areas. Those defendants are opposing this motion. The defendants have moved for the imposition of sanctions on the governments, based upon alleged misconduct with respect to expert reports. The defendants have also moved for reconsideration or certification of an order denying their motion that the federal and state governments are liable parties because of their ownership of the Palos Verdes Shelf. A new judge has just been assigned to the case and trial has been set for October 2000. The defendants view this as a favourable development.



36 Assets pledged, commitments and contingent liabilities (continued)

AstraZeneca is also involved in an action instituted in 1991 with the US District Court for the Eastern District of California. US and California state environmental agencies brought suit under CERCLA against Rhône-Poulenc for a declaration of liability with respect to past and future response costs related to the release of mining wastes at the Iron Mountain site in Northern California. Zeneca has an indemnity obligation to Rhône-Poulenc for all liabilities arising from this site as a result of the acquisition and subsequent sale of Stauffer Chemical Company in 1987. Rhône-Poulenc brought counterclaims against state and federal agencies relating to the government's construction and operation of dams in the vicinity of Iron Mountain and the federal government's World War II and post-World War II activities at Iron Mountain. The Court ruled that as to the response activities conducted to date, the government was not a liable party. The Court also ruled that Rhône-Poulenc was the successor to the company which had conducted the mining at Iron Mountain. Owing to a change in the law, Rhône-Poulenc has requested that the Court reconsider this decision. Because of pending settlement discussions, the Court agreed to review Rhône-Poulenc's request if settlement is not reached. At the request of the Court, the parties have retained a mediator in an attempt to settle the matter and have had ongoing settlement discussions. If settlement is not reached, trial is not expected before 2001. The governments are seeking recovery of more than \$31 million in past response costs and a declaration of liability on future costs. AstraZeneca is complying with certain orders issued to Rhône-Poulenc by the Environmental Protection Agency to undertake response actions at the site. Costs incurred by AstraZeneca now exceed \$140 million.

EEOC investigation

During 1997, the Equal Employment Opportunity Commission in the USA completed its investigation of certain allegations of discrimination, including sexual harassment, at Astra USA, Inc. (the business and assets of Astra USA, Inc. were transferred to Astra Pharmaceuticals LP in connection with the Astra/Merck restructuring arrangements; following the merger, Astra Pharmaceuticals LP is now called AstraZeneca LP). In March 1997, the EEOC and Astra USA, Inc. initiated conciliation sessions which in February 1998 resulted in a consent decree pursuant to which Astra USA, Inc. established a claim fund of \$9.85 million. This fund was apportioned among the eligible claimants by an independent Special Master, which apportionment was approved by the US court handling this matter. During 1999, the fund was distributed according to the court's instructions. The \$9.85 million has been charged to the Company's earnings. In addition to those members of the class who filed a claim and, as a result, will be barred from seeking additional damages through an action filed in the US court system, a small number of individuals have pursued actions which remain in litigation.

Monsanto and Touchdown

In June 1998 Monsanto Company brought an action in Alabama state court against Zeneca Inc. and Pioneer Hi-Bred International Inc. seeking a declaratory judgement that Zeneca's testing of its *Touchdown* herbicide on glyphosate-tolerant soybeans constituted a breach of contract or tortious interference with a licence between Monsanto and Pioneer. In July 1998, Zeneca filed an action against Monsanto in the Federal District Court in Delaware asserting anti-trust and patent claims against Monsanto arising out of Monsanto's practices in the development, marketing and sale of glyphosate-tolerant soybeans. Zeneca was seeking declaratory relief, injunctive relief, unspecified compensatory damages, treble damages, punitive damages, pre-judgement interest, costs and attorney's fees. Monsanto's Alabama action was dismissed by the court in August 1998. Zeneca then amended its federal action to include a request, in which Pioneer joined as co-plaintiff, for adjudication of the breach of contract claims raised by Monsanto in the state court action. In October 1998, Monsanto moved to dismiss the complaint. Monsanto's motion was denied by the Federal Court in Delaware in December 1998. In August 1998, Monsanto brought an action in Missouri state court against Zeneca and Pioneer. Monsanto sought unspecified actual damages in excess of \$50,000, pre-judgement interest, punitive damages, injunctive relief and costs. In October 1998, Zeneca moved to dismiss, or alternatively stay, Monsanto's Missouri complaint on the basis of Zeneca's prior pending federal lawsuit.

In March 1999, both the Delaware litigation and the Missouri litigation were settled on terms favourable to Zeneca, including a licence for Zeneca to sell *Touchdown* for use over Monsanto's glyphosate-tolerant soybeans, corn and cotton. Orders of dismissal were entered in both cases.

General

AstraZeneca is also involved in various other legal proceedings considered typical to its businesses, including some remaining US retail pharmacy anti-trust class and individual actions outside the scope of the settlement described above, litigation relating to product liability and infringements of intellectual property rights and the validity of certain patents. Although there can be no assurance regarding the outcome of any of the legal proceedings referred to in this Note 36 to the financial statements, AstraZeneca believes that they will not have a materially adverse effect on AstraZeneca's financial position.

Financial Statements

Notes relating to the financial statements

37 Leases

Total rentals under operating leases charged to profit and loss account were as follows:

	1999	1998	1997
	\$m	\$m	\$m
Hire of plant and machinery	33	24	10
Other	50	40	26
	83	64	36

Commitments under operating leases to pay rentals during the year following the year of these financial statements analysed according to the period in which each lease expires were as follows:

	Land and buildings		Other assets	
	1999	1998	1999	1998
	\$m	\$m	\$m	\$m
Expiring within 1 year	2	4	5	9
Expiring in years 2 to 5	21	18	23	19
Expiring thereafter	10	15	3	1
	33	37	31	29

The future minimum lease payments under operating leases that have initial or remaining terms in excess of one year, and future minimum lease payments under capitalised leases together with the present value of the net minimum lease payments at 31 December 1999 were as follows:

	Operating leases		Finance leases	
	1999	1998	1999	1998
	\$m	\$m	\$m	\$m
Obligations under leases comprise				
Rentals due within 1 year	64	66	1	7
Rentals due after more than 1 year				
After 5 years from balance sheet date	74	77	-	10
From 4 to 5 years	18	25	-	2
From 3 to 4 years	29	32	-	2
From 2 to 3 years	38	37	-	2
From 1 to 2 years	48	48	1	2
	207	219	1	18
	271	285	2	25
Less: amounts representing interest			-	(5)
Present value of net minimum lease payments			2	20
Less: current lease obligations			-	(5)
Non-current lease obligations			2	15

The group had no commitments (1998 \$nil) under finance leases at the balance sheet date which were due to commence thereafter.



38 Statutory and other information

Included in debtors are interest free loans of \$24,000 and \$4,000 to two officers of the Company. These loans are provided in accordance with the Company's policy of providing relocation assistance to staff who have been transferred.

	1999	1998	1997
	\$m	\$m	\$m
Audit fees			
KPMG Audit Plc	3.7	4.3	3.8
Deloitte & Touche	2.1	2.0	1.7
Others	0.3	0.8	0.6
	6.1	7.1	6.1
Fees for other services			
KPMG Audit Plc and associates – UK	19.6	2.2	2.6
– Worldwide	4.9	3.5	1.5
Deloitte & Touche – UK	1.1	0.1	–
– Worldwide	3.5	1.1	1.4

The charge for the statutory audit of the Company, AstraZeneca PLC, was \$1,600 (1998 \$1,600, 1997 \$1,600).

The group had no material related party transactions which might reasonably be expected to influence decisions made by the users of these financial statements.

Financial Statements

Notes relating to the financial statements

39 Company information

Company Balance Sheet

At 31 December		1999	1998
	Notes	\$m	\$m
Fixed assets			
Fixed asset investments	39	905	890
		905	890
Current assets			
Debtors – amounts owed by subsidiaries (due after more than one year)		37,957	3,116
Total assets		38,862	4,006
Creditors due within one year			
Short-term borrowings (unsecured)		–	(2)
Other creditors	39	(2,015)	(528)
		(2,015)	(530)
Net current assets		35,942	2,586
Total assets less current liabilities		36,847	3,476
Creditors due after more than one year			
Loans – owed to subsidiaries	39	(590)	(590)
Net assets		36,257	2,886
Capital and reserves			
Called-up share capital	40	444	394
Share premium account	39	202	54
Capital redemption reserve	39	1	–
Other reserves	39	2,239	2,082
Profit and loss account	39	33,371	356
Shareholders' funds – equity interests		36,257	2,886

The financial statements on pages 58 to 128 were approved by the Board of Directors on 23 February 2000 and were signed on its behalf by:

Tom McKillop
Director

Jonathan Symonds
Director



39 Company information (continued)

Deferred taxation

The parent company had no deferred tax assets or liabilities (actual or potential) at 31 December 1999.

Fixed asset investments	Investments in subsidiaries		
	Shares	Loans	Total
	\$m	\$m	\$m
Cost			
At beginning of year	299	591	890
Acquisitions	15	-	15
Net book value at 31 December 1999	314	591	905
Net book value at 31 December 1998	299	591	890

Other creditors

	1999	1998
	\$m	\$m
Amounts due within one year		
Amounts owed to subsidiaries	1,181	86
Dividends to Shareholders	834	442
	2,015	528

Loans

	Repayment	1999	1998
	Dates	\$m	\$m
Loans (unsecured)			
US dollars			
6.58% loan	2003	295	295
7.2% loan	2023	295	295
Total loans		590	590

Loans or instalments thereof are repayable

After 5 years from balance sheet date	295	295
From 2 to 5 years	295	295
From 1 to 2 years	-	-
Total unsecured	590	590
Total due within one year	-	-
Total loans	590	590

Financial Statements

Notes relating to the financial statements

39 Company information (continued)

Reserves	Share premium account	Capital redemption reserve	Other reserves	Profit and loss account	1999 Total	1998 Total
	\$m	\$m	\$m	\$m	\$m	\$m
At beginning of year	54	–	2,082	356	2,492	2,475
Net profit for the financial year				34,807	34,807	671
Dividends				(1,609)	(1,609)	(668)
Share repurchase		1		(183)	(182)	–
Redenomination of share capital			157		157	–
Share premiums	148				148	14
At end of year	202	1	2,239	33,371	35,813	2,492

The net profit for the financial year includes a net gain of \$32,918m in respect of the sale to a subsidiary of the Company's investment in Astra AB. This amount is not distributable. Included in other reserves is the special reserve of \$157m arising on the redenomination of share capital. Of the total balance on the other reserves, \$410m is distributable.

As permitted by Section 230 of the Companies Act 1985, the Company has not presented its profit and loss account.



40 Called-up share capital of parent company

	Authorised	Allotted, called-up and fully paid	
	1999	1999	1998
	\$m	\$m	\$m
Ordinary Shares (\$0.25 each)	444	444	394
Unissued Ordinary Shares (\$0.25 each)	156	-	-
Redeemable Preference Shares	-	-	-
	600	444	394

The movements in share capital during the year can be summarised as follows:

	No. of shares	
	(million)	\$m
At beginning of year	950	394
Nominal value of shares issued to Astra AB shareholders	-	206
Group share capital at beginning of year	950	600
Shares issued on merger	826	-
Redenomination of share capital	-	(157)
Issues of shares	3	2
Repurchase of shares	(4)	(1)
At 31 December 1999	1,775	444

Redenomination

In connection with the merger, AstraZeneca's share capital was redenominated into 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 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.

Merger

A total of 825,932,791 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 per cent of Astra's shares and the compulsory acquisition procedure has been initiated to acquire for cash the outstanding shares.

Share buy-back

During the second half of the year the company purchased, and subsequently cancelled, 4,338,444 Ordinary Shares at an average price of 2603 pence per share for a consideration, including expenses, of \$183 million. The excess of the consideration over the nominal value has been charged against the profit and loss account reserve.

Share options

A total of 3,593,062 shares were issued during the year in respect of share options. Details of movements in the number of shares under option are shown in Note 33, details of options granted to Directors are shown in Note 34.

Financial Statements

Principal subsidiaries, joint ventures and associates

At 31 December 1999	Country	Percentage of voting share capital held	Principal activity
United Kingdom			
Zeneca Limited	England	100#	Research, production, marketing
AstraZeneca Insurance Company Limited	England	100	Insurance and reinsurance underwriting
Astra Pharmaceuticals Ltd	England	100	Research, production, marketing
Continental Europe			
N.V. Astra Pharmaceuticals S.A.	Belgium	100	Marketing
A.S.P. S.A.	France	100	Production
Laboratoires Astra France	France	100	Production, marketing
Zeneca Pharma S.A.	France	100	Research, production, marketing
Astra GmbH	Germany	100	Development, production, marketing
Zeneca Holding GmbH	Germany	100	Production, marketing
Astra Farmaceutici S.p.A.	Italy	100	Marketing
Zeneca S.p.A.	Italy	100	Production, marketing
Laboratorio Astra España S.A.	Spain	100	Production, marketing
Astra AB	Sweden	99.7	Research and development, production, marketing
Astra Arcus AB	Sweden	100	Research and development
Astra Draco AB	Sweden	100	Research and development
Astra Hässle AB	Sweden	100	Research and development
Astra Production Chemicals AB	Sweden	100	Production
Astra Production Liquid Products AB	Sweden	100	Production
Astra Production Tablets AB	Sweden	100	Production
Astra Tech AB	Sweden	100	Research and development, production, marketing
Advanta B.V.	The Netherlands	50†	Processing and marketing of seeds
Astra Pharmaceutica B.V.	The Netherlands	100	Marketing
Stauffer Chemical B.V.	The Netherlands	100	Production

Financial Statements

Principal subsidiaries, joint ventures and associates



At 31 December 1999	Country	Percentage of voting share capital/interest held	Principal activity
The Americas			
Zeneca Brasil Ltda.	Brazil	100	Production, marketing
AstraZeneca do Brasil Ltda.	Brazil	100	Production, marketing
Astra Pharma Inc.	Canada	100	Research, production, marketing
IPR Pharmaceuticals Inc.	Puerto Rico	100	Production
AstraZeneca LP	USA	99	Development, production, marketing
Salick Health Care, Inc.	USA	100	Provision of disease-specific healthcare services
Zeneca Holdings Inc.	USA	100	Production, marketing
Asia, Africa & Australasia			
Astra Pharmaceuticals Pty Ltd.	Australia	100	Research, production, marketing
Astra (Wuxi) Pharmaceutical Co. Ltd.	China	100	Production, marketing
Zeneca Asia Pacific Ltd.	Hong Kong	100	Production
Astra Japan Ltd	Japan	100	Production, marketing
Zeneca K.K.	Japan	100	Production, marketing
Zeneca Yakuhin K.K.	Japan	60	Production

shares held directly

† equity accounted joint venture

The companies and other entities listed above are those whose results or financial position principally affected the figures shown in the group's annual 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 dates of principal subsidiaries and associates are 31 December, except for Salick Health Care, Inc. which is 30 November. AstraZeneca operates through 324 subsidiary companies. Products are manufactured in some 20 countries worldwide and are sold in over 100 countries.

Financial Statements

Additional information for US investors

Differences between UK and US accounting principles

The accompanying consolidated financial statements included in this report are prepared in accordance with UK GAAP. Certain significant differences between UK GAAP and US GAAP which affect AstraZeneca's net income and shareholders' equity are set out below.

Purchase accounting adjustments

Under UK GAAP the merger of Astra and Zeneca has been accounted for as a 'merger of equals' (pooling-of-interests). Under US GAAP the merger has been accounted for as the acquisition of Astra by Zeneca using 'purchase accounting'. Under purchase accounting, the cost of the investment is calculated at the market value of the shares issued together with other incidental costs and the assets and liabilities of the acquired entity are recorded at fair value. As a result of the fair value exercise, increases in the values of Astra's tangible fixed assets and inventory were recognised and values attributed to their in-process research and development, existing products and assembled work force, together with appropriate deferred taxation effects. The difference between the cost of investment and the fair value of the assets and liabilities of Astra has been recorded as goodwill. The amount allocated to in-process research and development is required, by US GAAP, to be expensed immediately in the first reporting period after the business combination. Fair value adjustments to the recorded amount of inventory have been expensed in the period the inventory was utilised and additional amortisation and depreciation have also been recorded in respect of the fair value adjustments to tangible and intangible assets and the resulting goodwill. Pre-acquisition results of Astra are excluded from US GAAP net income.

In the consolidated financial statements prepared under UK GAAP, goodwill arising on acquisitions made prior to 1 January 1998 accounted for under the purchase method has been eliminated against shareholders' equity, whilst under US GAAP this goodwill (after allocations to the fair value of tangible and intangible assets) is required to be capitalised and amortised. Under the requirements of UK Financial Reporting Standard 10 'Goodwill and Intangible Assets', goodwill on acquisitions made after 1 January 1998 is capitalised and amortised over its estimated useful life which is generally presumed not to exceed 20 years. UK GAAP requires that on subsequent disposal or termination of a previously acquired business, any goodwill previously taken directly to shareholders' equity is then charged in the income statement against the profit or loss on disposal or termination.

For the purpose of the adjustments to US GAAP included below, goodwill (including that capitalised under UK GAAP) is being amortised through the income statement over the estimated useful lives assigned to each individual acquisition. At 31 December 1999, these lives varied between 5 years and 40 years with a weighted average life of approximately 28 years. Identifiable intangible assets, which principally include patents, "know-how" and product registrations, are amortised over their estimated useful lives which vary between 4 years and 40 years with a weighted average life of approximately 16 years.

At 31 December 1999 and 1998, shareholders' equity includes capitalised goodwill of \$15,793m and \$1,480m respectively (net of amortisation and impairment of \$1,945m and \$659m) and capitalised identifiable intangible assets of \$13,825m and \$314m respectively (net of amortisation and impairment of \$1,439m and \$86m). The carrying value of goodwill is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Provision is made where there is a permanent impairment to the carrying value of capitalised goodwill and intangible assets. Goodwill on businesses disposed of is charged to the gain or loss on disposal.

On disposal of a business, the gain or loss under US GAAP may differ from that under UK GAAP due principally to goodwill capitalised and amortised, together with the appropriate share of other differences between UK and US accounting principles recognised previously.

Capitalisation of interest

AstraZeneca does not capitalise interest in its financial statements. US GAAP requires interest incurred as part of the cost of constructing fixed assets to be capitalised and amortised over the life of the asset.

Dividends

Under UK GAAP ordinary share dividends proposed are provided for in the year in respect of which they are recommended by the Board of Directors for approval by the shareholders. Under US GAAP such dividends are not provided for until declared by the Board.



Differences between UK and US accounting principles (continued)

Deferred taxation

Deferred taxation is provided on a full liability basis under US GAAP, which permits deferred tax assets to be recognised if their realisation is considered to be more likely than not; under UK GAAP, provision is made for deferred taxation only if there is reasonable evidence that such deferred taxation will be payable in the foreseeable future.

Pension and post-retirement benefits

There are four main differences between UK GAAP and US GAAP in accounting for pension costs:

- (i) US GAAP requires that plan assets are valued by reference to their fair market values whereas UK GAAP permits an alternative measurement of assets which, in the case of the main United Kingdom retirement plan, is on the basis of the discounted present value of expected future income;
- (ii) US GAAP requires measurements of plan assets and obligations to be made as at the date of the financial statements or a date not more than three months prior to that date. Under UK GAAP, calculations may be based on the results of the latest actuarial valuation;
- (iii) US GAAP mandates a particular actuarial method - the projected unit credit method - and requires that each significant assumption necessary to determine annual pension cost reflects best estimates solely with regard to that individual assumption. UK GAAP does not mandate a particular method, but requires that the method and assumptions taken as a whole should be compatible and lead to the actuary's best estimate of the cost of providing the benefits promised; and
- (iv) under US GAAP, a negative pension cost may arise where a significant unrecognised net asset or gain exists at the time of implementation. This is required to be amortised on a straight-line basis over the average remaining service period of employees. Under UK GAAP, AstraZeneca's policy is not to recognise pension credits in its financial statements unless a refund of, or reduction in, contributions is likely.

Restructuring costs

Under UK GAAP, provisions are made for restructuring costs once a detailed formal plan is in place and valid expectations have been raised in those affected that the restructuring will be carried out. US GAAP requires a number of specific criteria to be met before such costs can be recognised as an expense. Among these are the requirements that the costs incurred are incremental to other costs incurred by the company, or represent amounts to be incurred under contractual obligations which are not associated with or do not benefit activities that will be continued. Also, all significant actions arising from a restructuring and their completion dates must be identified by the balance sheet date. To the extent that restructuring costs are related to the activities of the acquired company, US GAAP allows them to be recognised as a liability upon acquisition.

Software costs

Under UK GAAP, AstraZeneca expenses all software costs. Under US GAAP, with effect from 1 January 1999, certain of these costs are required to be capitalised and amortised over three years.

Foreign exchange

Under UK GAAP, unrealised gains and losses on foreign currency transactions to hedge anticipated, but not firmly committed, foreign currency transactions may be deferred and accounted for at the same time as the anticipated transactions. Under US GAAP such deferral is not permitted except in certain defined circumstances.

Financial Statements

Additional information for US investors

Differences between UK and US accounting principles (continued)

Current assets and liabilities

Current assets under UK GAAP include amounts which fall due after more than one year. Under US GAAP such assets would be reclassified as non-current assets. Borrowings under UK GAAP are classified according to the maturity of the financial instrument, while under US GAAP, certain borrowings would be classified according to the maturity of the available back-up facility. Provisions for liabilities and charges under UK GAAP include amounts due within one year which would be reclassified to current liabilities under US GAAP. In addition, provisions would be shown as part of amounts payable and accrued liabilities due after one year.

Statement of cash flows: Basis of preparation

AstraZeneca's Statement of Group Cash Flow is prepared in accordance with United Kingdom Financial Reporting Standard 1 (Revised 1996) ('FRS1'), whose objective and principles are similar to those set out in SFAS No.95, 'Statement of Cash Flows'. The principal differences between the standards relate to classification and also that the UK GAAP cash flow statement combines the cash flow statements of Astra and Zeneca for all periods whilst the US GAAP cash flow statements includes the cash flows of Astra only from the date of acquisition. Under FRS 1, the Company presents its cash flows for (a) operating activities; (b) dividends received from joint ventures and associates; (c) returns on investments and servicing of finance; (d) tax paid; (e) capital expenditure and financial investment; (f) acquisitions and disposals; (g) dividends paid to shareholders; (h) management of liquid resources; and (i) financing. SFAS No.95 requires only three categories of cash flow activity being (a) operating; (b) investing; and (c) financing.

Cash flows from taxation, returns on investments and servicing of finance and dividends received from joint ventures and associates under FRS 1 would be included as operating activities under SFAS No.95; capital expenditure and financial investment and acquisitions and disposals would be included as investing activities; and distributions would be included as a financing activity under SFAS No.95. Under FRS 1 cash comprises cash in hand and deposits repayable on demand, less overdrafts repayable on demand; and liquid resources comprise current asset investments held as readily disposable stores of value. Under SFAS No.95 cash equivalents, comprising short-term highly liquid investments, generally with original maturities of three months or less, are grouped together with cash; short-term borrowings repayable on demand would not be included within cash and cash equivalents and movements on those borrowings would be included in financing activities.

New accounting standards adopted

During January 1998, the American Institute of Certified Public Accountants (AICPA) issued Statement of Position 98-1 'Accounting for the Costs of Computer Software Developed or Obtained for Internal Use' ('SOP 98-1'). SOP 98-1 became effective for all fiscal years beginning after 15 December 1998 and provides guidance on when costs incurred for internal use computer software are and are not capitalised. AstraZeneca has adopted SOP 98-1.

New accounting standards not yet adopted

SFAS No. 133 – 'Accounting for Derivative Instruments and Hedging Activities' was issued in June 1998 and establishes accounting and reporting standards for derivative instruments and hedging activities. It is effective for fiscal years beginning after 15 June 2000. AstraZeneca has not yet determined the effect on the financial statements of the adoption of the standard.



Differences between UK and US accounting principles (continued)

The following is a summary of the material adjustments to net income and shareholders' equity which would have been required if US GAAP had been applied instead of UK GAAP.

Net income

	1999	1998	1997
	\$m	\$m	\$m
Net income, as shown in the consolidated statements of income before exceptional items	2,730	2,553	2,570
Exceptional items after tax	(1,587)	58	–
Net income for the period under UK GAAP	1,143	2,611	2,570
Pre-acquisition results of Astra	(413)	(1,427)	(1,374)
	730	1,184	1,196

Adjustments to conform to US GAAP

Purchase accounting adjustments (including goodwill and intangibles)
Deemed acquisition of Astra

In-process research and development	(3,315)	–	–
Inventory step-up	(826)	–	–
Amortisation and other acquisition adjustments	(759)	–	–
Others	(61)	(80)	(80)
Divestment of Specialties business	284	–	–
Impairment of Salick Health Care goodwill	(308)	–	–
Capitalisation, less disposals and amortisation of interest	5	8	5
Deferred taxation			
On fair values of Astra	547	–	–
Others	117	(28)	20
Pension expense	(103)	(53)	16
Post-retirement benefits/plan amendment	4	5	5
Software costs	29	–	–
Restructuring costs	119	–	–
Unrealised losses on foreign exchange and others	(2)	–	(20)
Net (loss)/income in accordance with US GAAP	(3,539)	1,036	1,142
Net (loss)/income from continuing operations	(4,071)	796	833
Net income from discontinued operations	108	240	309
Gain on disposal of Specialties business	424	–	–
Weighted average number of \$0.25 Ordinary Shares in issue (millions of shares)	1,569	950	948
Dilutive impact of share options outstanding (millions of shares)	3	4	3
Diluted weighted average number of \$0.25 Ordinary Shares in accordance with US GAAP (millions of shares)	1,572	954	951
Net (loss)/income per \$0.25 Ordinary Share and ADS in accordance with US GAAP – basic (\$)	(2.26)	1.09	1.20
– diluted (\$)	(2.25)	1.09	1.20

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Additional information for US investors

Differences between UK and US accounting principles (continued)

	1999	1998	1997
Net income/(loss) from continuing operations per \$0.25 Ordinary Share and ADS in accordance with US GAAP			
– basic (\$)	(2.60)	0.84	0.88
– diluted (\$)	(2.59)	0.84	0.88
Net income from discontinued operations per \$0.25 Ordinary Share and ADS in accordance with US GAAP			
– basic (\$)	0.07	0.25	0.32
– diluted (\$)	0.07	0.25	0.32

Statement of Comprehensive Income

The group's total recognised gains and losses under UK GAAP differ from the net income for the year (as set out in the group profit and loss account) in respect of foreign currency translation adjustments (net of related tax) and net unrealised gains and losses on short-term investments amounting to an aggregate loss of \$630m for the year ended 31 December 1999 (1998 loss of \$181m, 1997 loss of \$768m). The foreign currency translation adjustments are set out in the statement of total recognised gains and losses. The unrealised gains on short-term investments are included in other movements in the statement of total recognised gains and losses and amounted to \$nil (1998 \$2m, 1997 \$1m) for the year.

The cumulative balance of net unrealised losses on short-term investments amounted to \$nil (1998 \$nil, 1997 \$2m). The cumulative exchange gains and losses (net of related tax) on the translation of foreign currency financial statements under UK GAAP are set out in the following note.

	Years ended 31 December		
	1999	1998	1997
	\$m	\$m	\$m
Balance at 1 January	(783)	(600)	169
Movement in year	(630)	(183)	(769)
Balance at 31 December	(1,413)	(783)	(600)

Stock compensation

In the group's financial statements prepared under UK GAAP, no cost is accrued for the share options awarded to employees under the Zeneca 1994 Executive Share Option Scheme and the Zeneca Savings-Related Share Option Scheme as the exercise price is equivalent to the market value at the date of grant. Under US GAAP the cost is calculated as the difference between the option price and the market price at the date of grant or, for variable plans, at the end of the reporting period. Under the requirements of APB Opinion No. 25 any compensation cost would be amortised over the period from the date the options are granted to the date they are first exercisable. SFAS No.123 sets out an alternative methodology for recognising the compensation cost based on the fair value at grant date. Had the group adopted this methodology, the effect on net income under US GAAP is shown below.

	1999	1998	1997
	\$m	\$m	\$m
Net (loss)/income under US GAAP as reported	(3,539)	1,036	1,142
Compensation cost	(16)	(13)	(12)
Pro forma net income	(3,555)	1,023	1,130
Net income per \$0.25 Ordinary Share and ADS under US GAAP (basic):			
As reported (\$)	(\$2.26)	\$1.09	\$1.20
Pro forma (\$)	(\$2.27)	\$1.08	\$1.19



Differences between UK and US accounting principles (continued)

The fair value of options granted is estimated, based on the stock price at the grant date, using the Black-Scholes option pricing model with the following assumptions:

	1999	1998	1997
Dividend yield	3.0%	2.0%	2.0%
Expected volatility	20.0%	20.0%	20.0%
Risk-free interest rate	5.1%	5.1%	7.3%
Expected lives : 1994 Scheme	6.0 years	6.0 years	6.0 years
: SAYE Scheme	4.4 years	4.6 years	4.6 years

The options are based on existing AstraZeneca shares and therefore have no dilution effect. Nor do allocated options entail any further expense undertaking for the Company. Subsequent to the effective date of the merger no share options have been awarded under the Astra Shareholder Value Incentive Plan.

In the initial phase-in period, the effects of applying SFAS No.123 for disclosing compensation cost may not be representative of the effects on pro forma net income and earnings per share for future years.

Shareholders' equity	1999	1998
	\$m	\$m
Total shareholders' equity under UK GAAP	10,302	10,929
Assets of Astra before acquisition	-	(6,757)
	10,302	4,172

Adjustments to conform to US GAAP

Purchase accounting adjustments (including goodwill and intangibles)

Deemed acquisition of Astra		
Goodwill	14,202	-
Tangible and intangible fixed assets	11,174	-
Others	490	1,157
Capitalisation, less disposals and amortisation of interest	151	181
Deferred taxation		
On fair value of Astra	(3,172)	-
Others	(247)	(111)
Dividend	834	442
Pension expense	(172)	(241)
Post-retirement benefits/plan amendment	(31)	(42)
Software costs capitalised	29	-
Restructuring costs	119	-
Others	56	-
Shareholders' equity in accordance with US GAAP	33,735	5,558

Financial Statements

Additional information for US investors

Differences between UK and US accounting principles (continued)

Acquisitions

The adjustments to revalue the assets and liabilities of Astra to fair value and allocate the excess purchase consideration over fair value of net assets acquired, based on management best estimates of fair value, are as follows:

	\$m
Total purchase consideration	33,933
Less:	
Book value of Astra's net assets	6,935
Estimated excess fair value of Astra's inventory	(a) 826
Estimated excess fair value of Astra's property, plant and equipment	(a) 288
Estimated fair value attributed to other intangible assets	(b) 11,796
Estimated fair value of in-process research and development projects	(d) 3,315
Deferred tax liabilities related to purchase price adjustments	(3,765)
Goodwill	(c) 14,538

- (a) The excess of fair value over book value of Astra's reported net tangible assets is related primarily to buildings and land and inventory.
- (b) Fair values attributed to other intangible assets relate to Astra's product rights on its existing products and Astra's marketing and R&D workforce. The fair value has been determined based on risk-adjusted discounted net future cash flow analysis for its current approved product portfolio which includes all existing approved products within Astra's therapeutic areas and supplemental products in the development process which build upon existing chemical entities within the existing therapeutic areas and which are in late stages of development. The estimates of the weighted average useful life of the product rights are based on the future period over which the substantial majority of the estimated net future cash flow value is expected to be realised.
- (c) Goodwill is being amortised over 20 years.
- (d) The amount of total consideration allocated to Astra's in-process research and development projects ('IPRD') has been estimated using estimates of the status and prospects for the various research and development projects within Astra's research and development portfolio as contained in its strategic plans. The IPRD estimates relate only to projects involving NCE research and development and do not include projects involving supplemental new drug applications based on existing products or product extension development activity. The methodology used in deriving the estimated value of IPRD was (i) to project net future cash flows for prioritised NCEs in the current research and development portfolio based on estimated current therapeutic demand and price assumptions, less relevant anticipated expenses, (ii) to risk-adjust the projected net future cash flows for likelihood of future realisation based on Astra's historical experience-derived probability factors for NCE success, and (iii) to discount the risk-cash flows based on the first ten years of the post-launch expected life cycle attributed to each project. In determining the final value allocated to IPRD, the result of the above valuation methodology was further reduced based on the percentage of R&D activity undertaken to date compared to total R&D activity required to complete the project.



Differences between UK and US accounting principles (continued)

Pension and post-retirement benefits

For the purposes of US GAAP, the pension costs of the major UK retirement plan and of the retirement plans of the major non-UK subsidiaries have been restated in the following tables in accordance with the requirements of SFAS No. 132. These plans comprise a substantial portion of the actuarial liabilities of all AstraZeneca retirement plans. The changes in projected benefit obligations, plan assets and details of the funded status of these retirement plans, together with the changes in the accumulated other post-retirement benefit obligations, under SFAS No. 132 are as follows:

	Pension benefits		Other post-retirement benefits	
	1999	1998	1999	1998
	\$m	\$m	\$m	\$m
Change in projected benefit obligation				
Benefit obligation at beginning of year	5,199	4,577	222	219
Service cost	147	141	9	5
Interest cost	284	319	11	15
Participant contributions	20	20	-	2
Plan amendments	2	(13)	-	-
Actuarial (gain)/loss	(111)	357	6	(7)
Special termination benefits	62	-	-	-
Acquisitions and disposals	-	30	-	-
Settlement and curtailment	(219)	-	(10)	-
Benefits paid	(237)	(236)	(14)	(16)
Other movements including exchange	(111)	4	-	4
Benefit obligation at end of year	5,036	5,199	224	222

	Pension benefits	
	1999	1998
	\$m	\$m
Change in plan assets		
Fair value at 1 January	4,346	3,900
Actual return on plan assets	805	437
Group contribution	432	198
Participant contributions	20	20
Acquisitions and disposals	-	23
Settlement and curtailment	(242)	-
Benefits paid	(237)	(236)
Other movements, including exchange	(89)	4
Fair value of plan assets at end of year	5,035	4,346
Funded status of plans	(1)	(853)
Unrecognised net loss	(305)	372
Prior service cost not recognised	110	153
Unrecognised net obligation on implementation	18	60
	(178)	(268)
Adjustments to recognise minimum liability		
Intangible assets	-	(63)
Accumulated other comprehensive income	-	(15)
Accrued benefit liability	(178)	(346)

There were no plan assets in respect of other post-retirement benefits.

Financial Statements

Additional information for US investors

Differences between UK and US accounting principles (continued)

At 31 December 1999, none of the main funds above had an accumulated benefit obligation in excess of plan assets. At 31 December 1999, the projected benefit obligation, accumulated benefit obligation and fair value of the plan assets in respect of the retirement plans above with accumulated benefit obligations in excess of plan assets were \$4,407m, \$3,948m and \$3,579m, respectively.

Assumed discount rates and rates of increase in remuneration used in calculating the projected benefit obligations together with long-term rates of return on plan assets vary according to the economic conditions of the country in which the retirement plans are situated. The weighted average rates used for calculation of year end benefit obligations and forecast benefit cost in the main retirement plans and other benefit obligations for SFAS No. 132 purposes were as follows:

	Pension benefits			Other post-retirement benefits		
	1999	1998	1997	1999	1998	1997
	%	%	%	%	%	%
Discount rate	5.7	5.7	7.0	7.2	6.4	7.0
Long-term rate of increase in remuneration	4.5	4.5	5.6	n/a	n/a	n/a
Expected long-term return on assets	6.3	6.6	8.3	n/a	n/a	n/a

The group has assumed a long-term rate of increase in healthcare costs of 7.5%, reducing to 5.5%.

	Pension benefits			Other post-retirement benefits		
	1999	1998	1997	1999	1998	1997
	\$m	\$m	\$m	\$m	\$m	\$m
Net periodic cost						
Service cost – present value of benefits accruing during the year	147	141	111	9	5	3
Interest cost on projected benefit obligations	284	319	288	11	15	20
Expected (return)/loss on assets	(277)	(325)	(355)	–	–	–
Settlement and curtailment	75	–	–	(10)	–	–
Net amortisation and deferral	69	64	79	–	–	–
Net periodic cost for the year	298	199	123	10	20	23

It is estimated that a 1 percentage point change in the weighted average healthcare costs trend would have the following effects on the accumulated benefit obligation and net periodic cost at 31 December 1999:

	1 percentage point	
	increase	decrease
Accumulated benefit obligation	10	(10)
Net periodic cost	1	(1)

Restatement of cash flow in accordance with US GAAP

	1999	1998	1997
	\$m	\$m	\$m
Cash inflow from operating activities	1,698	1,493	1,315
Cash outflow from investing activities	(224)	(906)	(575)
Cash outflow from financing activities	(1,407)	(773)	(619)
Increase/(decrease) in cash in the period	67	(186)	121

Group Financial Record – UK GAAP



For the years ended 31 December	1995	1996	1997	1998	1999
	\$m	\$m	\$m	\$m	\$m
Turnover and profits					
Group turnover	12,074	13,188	13,166	15,402	18,445
Cost of sales	(4,085)	(4,307)	(4,063)	(4,961)	(6,037)
Distribution costs	(374)	(385)	(364)	(367)	(343)
Research and development	(1,671)	(1,961)	(2,170)	(2,473)	(2,923)
Selling, general and administrative expenses	(3,566)	(3,751)	(3,838)	(4,812)	(6,585)
Other income	189	193	126	353	189
Group operating profit	2,567	2,977	2,857	3,142	2,746
<i>Group operating profit before exceptional items</i>	<i>2,670</i>	<i>2,977</i>	<i>2,857</i>	<i>3,051</i>	<i>3,908</i>
<i>Exceptional items charged to operating profit</i>	<i>(103)</i>	<i>-</i>	<i>-</i>	<i>91</i>	<i>(1,162)</i>
Share of operating profit of joint ventures and associates	354	504	722	539	(7)
Exceptional items	(306)	(56)	-	(29)	(776)
Net interest	75	118	81	47	(4)
Profit on ordinary activities before taxation	2,690	3,543	3,660	3,699	1,959
Taxation	(808)	(1,040)	(1,081)	(1,086)	(815)
Profit on ordinary activities after taxation	1,882	2,503	2,579	2,613	1,144
Attributable to minorities	(25)	(19)	(9)	(2)	(1)
Net profit for the financial year	1,857	2,484	2,570	2,611	1,143
Return on sales					
Group operating profit before exceptional items as a percentage of sales	22.1%	22.6%	21.7%	19.8%	21.2%
At 31 December					
	1995	1996	1997	1998	1999
	\$m	\$m	\$m	\$m	\$m
Balance sheets					
Fixed assets (tangible and intangible) and goodwill	5,251	5,661	5,894	8,721	9,717
Fixed asset investments	834	1,005	1,027	353	185
Current assets	8,044	9,118	9,095	9,404	9,914
Total assets	14,129	15,784	16,016	18,478	19,816
Creditors due within one year	(4,540)	(4,599)	(4,459)	(5,650)	(7,019)
Total assets less current liabilities	9,589	11,185	11,557	12,828	12,797
Creditors due after more than one year	917	912	902	801	1,202
Provisions for liabilities and charges	1,031	1,073	1,049	1,045	1,253
Minority equity interests	163	178	54	53	40
Shareholders' equity	7,478	9,022	9,552	10,929	10,302
Total liabilities and Shareholders' equity	9,589	11,185	11,557	12,828	12,797

Group Financial Record – UK GAAP

For the years ended 31 December	1995	1996	1997	1998	1999
	\$m	\$m	\$m	\$m	\$m
Cash flow					
Net cash inflow from operating activities	3,005	3,198	3,355	3,832	3,113
Dividends received from joint ventures and associates	243	328	369	262	3
Returns on investments and servicing of finance	65	98	(31)	103	29
Tax paid	(788)	(719)	(750)	(775)	(1,020)
Capital expenditure and financial investment	(918)	(1,182)	(1,292)	(1,369)	(2,731)
Acquisitions and disposals	(531)	227	(321)	(2,013)	1,978
Equity dividends paid to Shareholders	(628)	(750)	(882)	(995)	(1,216)
Net cash flow before management of liquid resources and financing	448	1,200	448	(955)	156

For the years ended 31 December	Pro forma combined	
	1998	1999
	\$m	\$m

Pro forma turnover and profits		
Group turnover	17,117	18,445
Cost of sales	(5,612)	(6,037)
Distribution costs	(375)	(343)
Research and development	(2,551)	(2,923)
Selling, general and administrative expenses	(5,334)	(6,597)
Other income	353	189
Group operating profit	3,598	2,734
Share of operating profit/(loss) of joint ventures and associates	3	(7)
Profits less losses on sale or closure of operations	(46)	237
Profits on sale of fixed assets	17	-
Merger costs	-	(1,013)
Net interest	(60)	(25)
Profit on ordinary activities before taxation	3,512	1,926
Taxation	(1,039)	(809)
Profit on ordinary activities after taxation	2,473	1,117
Attributable to minorities	(2)	(1)
Net profit for the financial year	2,471	1,116
Earnings per \$0.25 Ordinary Share before exceptional items	\$1.36	\$1.52
Earnings per \$0.25 Ordinary Share (basic)	\$1.39	\$0.63
Earnings per \$0.25 Ordinary Share (diluted)	\$1.39	\$0.63
Weighted average number of Ordinary Shares in issue (millions)	1,779	1,776

The pro forma profit and loss figures for 1998 and 1999 above include two further adjustments to the statutory figures to illustrate the effect on the sales and profits as if the Astra Merck restructuring and the merger related payments to Merck had occurred at the beginning of 1998 (rather than July 1998 and April 1999 respectively).

The pro forma figures incorporate sales of \$1,715m for 1998 related to the Astra Merck joint venture which are excluded from the statutory consolidation. Changes in the cost base which arise from the Astra Merck restructuring have also been back dated to 1 January 1998. The net effect of these pro forma adjustments is to reduce 1998 reported profits by \$55m, before tax relief of \$23m.

A pro forma amortisation cost of \$12m and notional interest cost of \$21m per quarter on the payments due to Merck on completion of the merger have also been provided for the period 1 January 1998 to 5 April 1999. These charges are offset by tax relief of \$6m per quarter.



Zeneca	1995	1996	1997	1998	*1999
Ordinary Shares in issue – millions					
At period end	947	947	949	950	953
Weighted average for period	946	947	948	950	951
Stock Market price – per \$0.25 Ordinary Share					
Highest (pence)	1334	1759	2265	2759	3037
Lowest (pence)	842	1227	1594	1860	2406
At period end (pence)	1246	1648	2141	2617	3037
Earnings per \$0.25 Ordinary Share before exceptional items	\$0.98	\$1.10	\$1.26	\$1.27	
Earnings per \$0.25 Ordinary Share (basic)	\$0.56	\$1.05	\$1.26	\$1.25	
Earnings per \$0.25 Ordinary Share (diluted)	\$0.56	\$1.05	\$1.26	\$1.24	
Dividends	\$0.49	\$0.54	\$0.63	\$0.70	
* For the period from 1 January 1999 to 6 April 1999					
Astra					
Ordinary Shares in issue – millions					
At period end	616	616	1,643	1,643	1,643
Weighted average for period	616	616	1,130	1,643	1,643
Stock Market price – per Astra A Share					
Highest (SEK)	100	129	157	173	190
Lowest (SEK)	64	92	112	117	154
At period end (SEK)	99	126	138	166	190
Stock Market price – per Astra B Share					
Highest (SEK)	100	126	148	169	190
Lowest (SEK)	63	91	109	112	154
At period end (SEK)	98	123	134	165	190
Earnings per Share (SEK)	5.33	5.75	6.21	7.18	
Dividends (SEK)	1.13	1.50	1.80	1.90	
* For the period from 1 January 1999 to 6 April 1999					
AstraZeneca					*1999
Ordinary Shares in issue – millions					
At year end					1,775
Weighted average for year					1,776
Stock Market price – per \$0.25 Ordinary Share					
Highest (pence)					2946
Lowest (pence)					2208
At year end (pence)					2568
Earnings per \$0.25 Ordinary Share before exceptional items					\$1.54
Earnings per \$0.25 Ordinary Share (basic)					\$0.64
Earnings per \$0.25 Ordinary Share (diluted)					\$0.64
Dividends					\$0.70

* For the period from 1 January 1999 to 31 December 1999 (except for Stock Market prices which are for the period from 6 April 1999 to 31 December 1999)

Shareholder Information

Group Financial Record – US GAAP

The selected financial data set out below for each of the years in the five year period ended 31 December 1999, has been extracted or derived from audited financial statements.

The selected financial data should be read in conjunction with, and are qualified in their entirety by reference to, the financial statements of AstraZeneca and the notes thereto, which are included elsewhere in this document.

Consolidated income statement data

For the years ended 31 December	1995	1996	1997	1998	1999
Net income/(loss) (\$ million)	577	907	1,142	1,036	(3,539)
Net income/(loss) per Ordinary Share	\$0.61	\$0.96	\$1.20	\$1.09	(\$2.26)
Diluted income/(loss) per Ordinary Share	\$0.60	\$0.95	\$1.20	\$1.09	(\$2.25)

Ratio of earnings to fixed charges

For the group with estimated material adjustments to accord with US GAAP	1995	1996	1997	1998	1999
	6.4	11.7	11.6	11.7	(19.3)

Consolidated balance sheet data

At 31 December	1995	1996	1997	1998	1999
	\$m	\$m	\$m	\$m	\$m
Total assets	8,936	9,537	9,577	10,221	45,405
Shareholders' equity	4,067	4,673	5,035	5,558	33,735

Merger accounting

For the purpose of US GAAP, the merger has been regarded as a purchase accounting acquisition of Astra by Zeneca. Accordingly the US GAAP results above for the period from 1995 through 1998 are not restated for the merger with Astra and represent the previously reported results of Zeneca Group PLC.

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 (excluding capitalised interest). Fixed charges consist of interest (including capitalised interest) on all indebtedness, amortisation of debt discount and expense and that portion of rental expense representative of the interest factor. The comparative figures have been restated from those previously disclosed to reflect the reclassification of the operations of Specialties and Agrochemicals as discontinued.



Percentage analysis at 31 December 1999 of issued share capital

By size of account No. of shares	1999 %
1 – 250	0.6
251 – 500	1.0
501 – 1,000	1.5
1,001 – 5,000	2.2
5,001 – 10,000	0.3
10,001 – 50,000	1.6
50,001 – 1,000,000	11.9
over 1,000,000†	80.9
Issued share capital	100.0

† includes VPC and ADR holdings

At 31 December 1999, AstraZeneca PLC had 204,764 registered holders of 1,775,067,825 Ordinary Shares of \$0.25 each. In addition there were approximately 40,000 holders of American Depositary Receipts representing 4.8 per cent of the issued share capital and 196,000 holders of shares held under the VPC Services Agreement representing 29.8 per cent of the issued share capital. The ADRs, each of which is equivalent to one Ordinary Share, are issued by Morgan Guaranty Trust Company of New York.

Nature of trading market

The tables below set forth, for the four quarters of 1998 and the first quarter of 1999, the reported high and low share prices of Zeneca Group PLC and Astra AB. Since April 1999, as a result of the AstraZeneca merger, these shares have not been publicly traded on any market or exchange. Therefore, the tables below also set forth, for the remaining three quarters of 1999, the reported high and low share prices of AstraZeneca PLC.

Zeneca Group PLC

Ordinary Shares

The reported high and low middle market closing quotations (and VWAP prices (see below) from 14 December 1998) in pence for Zeneca shares on the London Stock Exchange ('LSE'), are derived from The Daily Official List. The middle market closing quotation of a security was the standard method of describing the price of a security listed on the LSE until 13 December 1998, and is the mean of (i) the highest price offered by any registered market maker to purchase the security (the bid price); and (ii) the lowest price required by any registered market maker to sell the security (the offer price), as at the close of business on a given day. Starting 14 December 1998, the LSE adopted the Volume-Weighted Average Price (VWAP) as the new closing price mechanism. The VWAP price is obtained by dividing the total value of trades in the last ten minutes of the trading period by the total volume of trades in the same period. If there are no trades in the closing ten minutes, the VWAP price equals the price of the last automatically executed trade prior to the closing ten minutes.

American Depositary Shares

The reported high and low sales prices of American Depositary Shares are as reported by Dow Jones (ADR Quotations). Until April 1999, Zeneca Group PLC American Depositary Shares (each representing one Ordinary Share) evidenced by American Depositary Receipts issued by Morgan Guaranty Trust Company of New York, as depositary, were listed on the New York Stock Exchange.

	Ordinary		Zeneca ADS	
	High	Low	High	Low
	(pence)	(pence)	(US\$)	(US\$)
1998 – Quarter 1	2747	2125	45.08	36.08
– Quarter 2	2759	2446	47.63	41.50
– Quarter 3	2597	2070	43.88	35.88
– Quarter 4	2711	1860	45.25	32.88
1999 – Quarter 1	3037	2406	48.50	40.50

Shareholder Information

Astra AB

Until April 1999, the principal market for trading in the shares of Astra AB was the Stockholm Stock Exchange ('SSE'), on which the shares had been traded since 1955. From 1985 until April 1999, the shares were listed on the London Stock Exchange and also quoted on SEAQ International. From 1996 until April 1999, American Depositary Shares ('ADSs') representing the company's A Shares and B Shares had been listed on The New York Stock Exchange, and were available in the United States through an American Depositary Receipt ('ADR') program established pursuant to separate Depositary Agreements entered into by the company and The Bank of New York, as depositary. One ADS represented one Share.

The high and low closing sale prices for the A Shares and the B Shares are as stated in the Official List of the SSE, which reflects price and volume information for trades completed by members on the SSE during the day as well as for inter-dealer trades completed off the SSE and certain inter-dealer trades completed during the trading on the previous business day.

	Astra							
	A-Shares				B-Shares			
	Ordinary		ADS		Ordinary		ADS	
	High	Low	High	Low	High	Low	High	Low
	(SEK)	(SEK)	(US\$)	(US\$)	(SEK)	(SEK)	(US\$)	(US\$)
1998 – Quarter 1	173.0	135.5	21.94	16.94	168.0	130.5	21.31	16.38
– Quarter 2	171.0	153.0	21.94	19.69	167.5	148.0	21.75	19.31
– Quarter 3	166.5	127.0	20.75	15.94	162.5	123.0	20.31	15.13
– Quarter 4	170.5	117.5	21.88	15.31	169.0	112.5	20.75	14.63
1999 – Quarter 1	188.5	155.5	23.44	18.75	186.5	154.5	23.13	18.88

AstraZeneca PLC

Since April 1999, as a result of the AstraZeneca merger, the principal markets for trading in the shares of AstraZeneca PLC are the London, Stockholm, and New York Stock Exchanges. The high and low prices are derived as set out above for the Zeneca Group PLC and Astra AB shares.

	AstraZeneca					
	Ordinary LSE		ADS		Ordinary SSE*	
	High	Low	High	Low	High	Low
	(pence)	(pence)	(US\$)	(US\$)	(SEK)	(SEK)
1999 – Quarter 2	2946	2362	46.56	38.10	403	315
– Quarter 3	2589	2208	42.19	35.11	352	289
– Quarter 4	2926	2465	47.77	40.06	401	336

*Principally held in bearer form

Astra Zeneca PLC American Depositary Shares (each representing one Ordinary Share) evidenced by American Depositary Receipts issued by Morgan Guaranty Trust Company of New York, as depositary, are listed on the New York Stock Exchange. As of 14 March 2000, the proportion of Ordinary Shares represented by American Depositary Shares was 4.7% of the Ordinary Shares outstanding.

Number of registered holders of Ordinary Shares as of 14 March 2000:

– In the United States	749
– Total	230,490

Number of record holders of American Depositary Receipts as of 14 March 2000:

– In the United States	3,525
– Total	3,587



Control of registrant

(a) 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.

(b) (i) As of 14 March 2000 no person known to the Company owned more than 10 per cent of any class of the Company's voting securities.

(ii) As of 14 March 2000 the total amount of the Company's voting securities owned by Directors and Officers of the Company was:

Title of class	Amount owned (\$0.25 shares)	Per cent of class
Ordinary Shares	619,268	0.035

(c) The Company does not know of any arrangements the operation of which might result in a change in the control of the Company.

Substantial shareholdings

On 14 March 2000 (not more than one month prior to the date of the Notice of Annual General Meeting) the following had disclosed an interest in the issued Ordinary Share capital of the Company in accordance with the requirements of Sections 198-208 of the Companies Act 1985:

Shareholder	Number of shares	Percentage of issued share capital
The Capital Group Companies, Inc.,	138,837,853	7.8
Investor AB	91,545,308	5.2

No other person held a notifiable interest in shares, comprising 3% or more of the issued Ordinary Share capital of the Company, appearing in the register of interests in shares maintained under the provisions of Section 211 of the Companies Act 1985.

Shareholder Information

Options to purchase securities from registrant or subsidiaries

(a) As of 14 March 2000 options outstanding to subscribe for Ordinary Shares of \$0.25 of the Company were:

Number of shares	Subscription price	Normal expiry date
7,310,683	630p - 2749p	2000 - 2009

The weighted average subscription price of options outstanding at 14 March 2000 was 1798p.

(b) Included in paragraph (a) are options granted to Directors and Officers of AstraZeneca as follows:

Number of shares	Subscription price	Normal expiry date
810,546	630p - 2749p	2001 - 2009

(c) Included in paragraph (b) are options granted to individually named Directors. Details of these option holdings as at 31 December 1999 are shown in Note 34 to the financial statements.

No Director exercised any options between 31 December 1999 and 14 March 2000.

Dividend payments

The record date for the second interim dividend payable on 17 April 2000 (in the UK, US and Sweden) was 10 March 2000. Shares have traded ex-dividend on the London Stock Exchange from 6 March 2000 and on the Stockholm Stock Exchange from 8 March 2000. ADRs have traded ex-dividend on the New York Stock Exchange from 8 March 2000. Future dividends will normally be paid as follows:

First interim: Announced end of July/beginning of August and paid in October
Second interim: Announced in February and paid in April

Registrar and Transfer Office	Depository for ADRs	Swedish Securities Registrar Centre
The AstraZeneca Registrar	Morgan Guaranty Trust Company of New York	VPC AB
Lloyds TSB Registrars	ADR Service Center	Box 7822
The Causeway	PO Box 842006	S-103 97 Stockholm
Worthing	Boston, MA 02284-2006	
West Sussex BN99 6DA		
Telephone (01903) 502541	Telephone (781) 575 4328	Telephone (8) 402 9000

Results

Unaudited trading results of AstraZeneca in respect of the first three months of 2000 will be published in early May 2000 and results in respect of the first six months of 2000 will be published in early August 2000.



Taxation for US residents

The following summary of the principal UK and certain US tax consequences of ownership of Ordinary Shares or ADRs is based on current UK and US Federal tax law and practice and in part on representations of Morgan Guaranty Trust Company of New York as Depository for ADRs and assumes that each obligation in the deposit agreement among the Company, the Depository and the holders from time to time of ADRs and any related agreement will be performed in accordance with its terms. The US Treasury has expressed concerns that parties to whom ADRs are released may be taking actions that are inconsistent with the claiming of foreign tax credits for US holders of ADRs. Accordingly, the analysis of the creditability of UK taxes described below could be affected by future actions that may be taken by the US Treasury.

United Kingdom and United States income taxes and tax treaties affecting remittance of dividends

Under the current Double Taxation (Income) Convention (the 'Convention') between the United Kingdom and the United States, US resident individuals who are the beneficial owners of dividends on Ordinary Shares, or American Depositary Receipts representing Ordinary Shares, in UK Corporations are generally entitled to a tax credit payment in respect of dividends equal to one-ninth (1/9) of the dividend paid. This tax credit payment is reduced by a UK withholding of up to 15% of the gross dividend paid. Therefore, a US holder will not actually receive any payment of this credit.

US resident corporate shareholders are generally treated in the same way as individuals provided that either alone, or together with associated corporations, they do not control directly or indirectly 10% or more of the voting shares of the Company and do not constitute investment or holding companies, 25% or more of the capital of which is owned, directly or indirectly, by persons that are not individuals resident in, and are not nationals of, the United States.

For US federal income tax purposes, the sum of the dividend paid and associated tax credit payment is includible in gross income by US resident shareholders and, for foreign tax credit limitation purposes, is foreign source income, treated separately, together with other items of 'passive income' (or, in the case of certain holders, 'financial services income'). The withholding deduction is treated as a foreign income tax which may, subject to certain limitations and restrictions, be eligible for credit against a US resident shareholder's US federal income tax liability (or deductible by such shareholder in computing its taxable income).

Shareholders whose holdings are effectively connected with a permanent establishment or fixed base in the United Kingdom, or who are corporations also resident in the United Kingdom for the purpose of the Convention, are not entitled to payment of the tax credit nor are they subject to any deductions from the dividend.

Shareholder Information

Taxation for US residents (continued)

United Kingdom 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 United Kingdom, and companies which are not resident in the United Kingdom 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 United Kingdom through a branch or agency.

United Kingdom inheritance tax

Under the current Double Taxation (Estates) Convention (the 'Estate Tax Convention') between the United States and the United Kingdom, Ordinary Shares or ADRs held by an individual shareholder who is domiciled for the purposes of the Estate Tax Convention in the United States, and is not for the purposes of the Estate Tax Convention a national of the United Kingdom, will generally not be subject to the 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 United Kingdom or, in the case of a shareholder who performs independent personal services, pertain to a fixed base situated in the United Kingdom. Where the ADRs or Ordinary Shares have been placed in trust by a settlor who, at the time of settlement, was a US resident shareholder, the ADRs or Ordinary Shares 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 both to UK inheritance tax and to US federal gift or estate tax, the Estate Tax Convention generally provides for double taxation to be relieved by means of credit relief.

Exchange controls and other limitations affecting security holders

- (a) 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 American Depositary Shares. However, 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 American Depositary Receipts. This is in lieu of the normal 0.5% stamp duty on all purchases of Ordinary Shares.
- (b) 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 to be registered holders of notes or debentures of Zeneca Wilmington Inc..

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



Definitions

In this document the following words and expressions shall, unless the context otherwise requires, have the following meanings:-

ADR	American Depositary Receipt evidencing title to an ADS
ADS	American Depositary Share representing one underlying Ordinary Share
Depository	Morgan Guaranty Trust Company of New York, as depository under the deposit agreement pursuant to which the ADRs are issued.
Directors	The Directors of the Company
The Company	AstraZeneca PLC
AstraZeneca, AstraZeneca Group or the group	The Company and its subsidiaries
Ordinary Shares	Ordinary Shares of \$0.25 each in the capital of the Company
LSE	London Stock Exchange Limited
NYSE	New York Stock Exchange, Inc.
SSE	Stockholm Stock Exchange
Pound sterling, £, GBP, pence or p	References to UK currency
SEK, kronor	References to Swedish currency
UK or United Kingdom	United Kingdom of Great Britain and Northern Ireland
US dollar, US\$ or \$	References to US currency
US or United States	United States of America
FDA	Food and Drug Administration of the US

Figures in parentheses in tables and 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 I.M.S. Health (IMS), a market research firm internationally recognised by the pharmaceutical industry. The 1999 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 is compiled using actual wholesaler data and data from statistically representative panels of retail and hospital pharmacies, which data is 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 disease.

Glossary of Terms

Terms used in Annual Report and Form 20-F

Accruals

Allotted

Bank borrowings

Called-up share capital

Capital allowances

Creditors

Current instalments of loans

Debtors

Earnings

Fixed asset investments

Freehold

Interest receivable

Interest payable

Loans

Prepayments

Profit

Profit and loss account

Reserves

Short-term investments

Share premium account

Stocks

Tangible fixed assets

Turnover

US equivalent or brief description

Accrued expenses

Issued

Payable to banks

Issued share capital

Tax term equivalent to US tax depreciation allowances

Liabilities/payables

Long-term debt due within one year

Receivables and prepaid expenses

Net income

Non-current investments

Ownership with absolute rights in perpetuity

Interest income

Interest expense

Long-term debt

Prepaid expenses

Income

Income statement/consolidated statement of income

Shareholders' equity

Redeemable securities and short-term deposits

Premiums paid in excess of par value of ordinary shares

Inventories

Property, plant and equipment

Sales



The information in this document that is referenced on this page is included in the Annual Report on Form 20-F for 1999 (1999 Form 20-F) and is filed with the Securities and Exchange Commission (SEC). The 1999 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 opposite. The 1999 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 1999 Form 20-F. The 1999 Form 20-F filed with the SEC may contain modified information and may be updated from time to time.

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