



**Shire Pharmaceuticals Group plc**

Annual report and accounts  
for the year ended 31 December 2001

Registered number: 2883758

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## Chairman's review

### **Chairman's statement**

2001 has been a landmark year for Shire. The completion of the acquisition of BioChem Pharma, Inc. (BioChem) increased the size and capability of the Shire Group and has positioned it well for future development and growth. Shire concluded 2001 as the third largest pharmaceutical group in the UK and one of the fastest growing specialty pharmaceutical companies in the world.

### **Acquisitions**

Shire has grown both organically and through acquisitions, with six completed mergers and acquisitions within the past seven years. On 11 May 2001, Shire announced that it had completed the acquisition of BioChem, a Canadian-based pharmaceutical company.

### **2001 results**

2001 concludes with strong financial results and the successful integration of BioChem. Group turnover and profit on ordinary activities before taxation increased by 69% and 6% respectively. Diluted earnings per share is 8.5 pence.

Much of the impressive growth in turnover was driven by our strong product portfolio, which includes ADDERALL XR™ and ADDERALL™, AGRYLIN™, PENTASA™, PROAMATINE™ and CARBATROL™. Additional growth arose from the launch of REMINYL™ in the US and the continued roll-out of ZEFFIX™.

### **Operations**

After completion of the acquisition, Shire extended its operations in Canada by adding two major development capabilities in Lead-Optimisation and Biologics. In addition, the acquisition added R&D know-how in anti-virals and strengthened our oncology expertise.

Significant growth in product sales contributed to Shire's successful year. Total product sales increased by 54% to £508.6 million. ADDERALL XR, for the treatment of Attention Deficit and Hyperactivity Disorder (ADHD) received Food and Drug Administration (FDA) approval in October 2001 and was launched in the US in November 2001, achieving an outstanding 8% market share of the ADHD market at 31 December 2001. Shire's marketing partner for REMINYL, Johnson & Johnson, launched this key product for the treatment of Alzheimer's disease in the US in May 2001. REMINYL was also launched in 14 other countries including Korea and the major European markets.

### **The Board**

Upon completion of the BioChem acquisition, three non-executive directors of Shire, Dr Zola Horovitz, Mr Joseph Smith and Mr John Spitznagel, resigned from the Board. Shire would like to take this opportunity to thank each of them for their contribution to the Group. On 11 May 2001, three BioChem directors, Dr Francesco Bellini, the Honourable James Andrews Grant and Mr Gérard Veilleux joined Shire's Board as non-executive directors.

### **People**

As the third largest pharmaceutical group in the UK, Shire employed 1677 employees worldwide at 31 December 2001. The Group believes in the importance of hiring well-qualified, experienced staff with proven records of

## Chairman's review

success. The Group's future success depends upon its ability to attract and retain such individuals. Shire will continue to apply and develop a strong focus on staff development at all levels.

### **Future prospects**

The launch of ADDERALL XR is progressing well. The recent approval of a generic competitor emphasises the need for marketing and promotional expense to maintain a rapid switch from ADDERALL and defend the overall ADHD franchise. In the medium and long term, management believe that ADDERALL XR is well positioned to establish itself as a leading once-daily ADHD treatment.

FOZNOL™ is expected to gain its first European regulatory approval at the end of Q2 2002, and then in the US during 2003. To ensure a successful launch of FOZNOL, the first Shire developed product which Shire will sell in key countries worldwide itself, it is desirable to support the product with an appropriate level of pre and post launch expenditure covering both the second half of 2002 and early 2003.

These competitive and cost pressures may compromise the Group's ability to grow in 2002. However, with the ongoing launch of four products, including ADDERALL XR, the prospects for the FOZNOL product launch in the second half of 2002 and the European launch of AGRYLIN during 2003, management remains confident about the Group's prospects in the medium and long term.

### **Dr James Cavanaugh**

Chairman

## Chief Executive's review

Shire is an international specialty pharmaceutical group, which seeks selectively to research, develop and market therapies in key areas of strategic focus.

Shire's business model has five levels of focus: specialist doctors, business, functional, geographic, therapeutic and platform technologies.

### **Specialist doctors**

Shire has a particular interest in innovative therapies. The term "specialty" refers to products prescribed by specialist doctors as opposed to those prescribed by primary care or general practitioners. We target specialists because they usually lead innovations in prescribing. Therefore, Shire targets or shall target specialist doctors who prescribe within the following therapeutic areas: central nervous system disorders, oncology and anti-infectives.

### **Business**

Shire's strategy as a specialty pharmaceutical group is to target a limited, but specific, audience and to maximise sales through a comparatively small sales force.

The concept of marketing to specialists allows us to clearly define our financial goals, which include high gross margin and operating margin targets, with the aim to reach both annual sales growth and investment in research and development above the industry average.

### **Functional**

Shire focuses on specific functional areas of the business that are identified as being key drivers for success, such as research, development and marketing.

The acquisition of BioChem added seven pre-Phase II projects to our portfolio, making a valuable contribution in planning towards the long-term success of Shire. The acquisition strengthened our in-house early phase development capabilities and added two valuable in-house sources of new projects, namely our Biologics business and our Lead Optimisation capabilities.

In order to reduce financial and business risk, Shire aims to maintain a careful and objective discipline in its approach to R&D risk management by balancing its portfolio of projects towards those projects viewed as low to medium risk. Shire considers a number of elements, which might include the class of compound, drug target, or mode of action. The risk for in-licensed projects is also managed by looking at the current stage of development of a particular project.

Shire's strategy also includes the identification of products that could be enhanced using its oral drug delivery company, Shire Laboratories, Inc. based in Maryland, USA. Examples of such projects are ADDERALL XR and CARBATROL. Shire seeks to obtain patent protection through drug delivery expertise wherever possible.

Another very important source of growth for Shire is its search function. This function has been a key growth driver, enabling the identification of new projects, products and acquisition opportunities.

## Chief Executive's review

The sales and marketing function is another essential factor contributing to Shire's success. The Group takes pride in its well-trained and highly-motivated sales force that has, through the rapid advancement of the Group's main marketed products and the recent launch of ADDERALL XR, demonstrated outstanding professionalism and performance.

### **Geography**

Shire's aim is to market its products using its own sales forces in eight major pharmaceutical markets of the world. In 2000 Shire entered Spain and also set up a representative office in Singapore to manage its presence in the Pacific Rim markets. The outstanding market is Japan, and it is the intention to build a presence there by 2004, either by launching Shire's own products, or through acquisition.

The increased geographic coverage has already enhanced Shire's ability to attract potential licensors. The Group aims to capitalise on this in the future as well as on the wider geographic rights it holds for existing and future products.

### **Therapeutic areas**

Following completion of the acquisition of BioChem, Shire's main areas of therapeutic focus are central nervous system disorders, oncology and anti-infectives, supported by two platform technologies: Advanced Drug Delivery and Biologics. Shire also continues to market two of its major products in the metabolic diseases and gastroenterology specialist fields. The Group's overriding strategy of targeting specialty pharmaceutical markets remains unchanged.

### **Rolf Stahel**

Chief Executive

## Financial review

The following review should be read in conjunction with the Group's consolidated financial statements and related notes appearing elsewhere in this report.

### **Material acquisitions**

On 11 May 2001 Shire acquired the entire issued share capital of BioChem for a consideration of £2.5 billion, which comprised the issue of 179.4 million ordinary shares and 17.3 million exchangeable shares. The transaction was accounted for using acquisition accounting.

### **Results of operations**

The Group recorded a pre-tax profit of £81.4 million (2000: £76.8 million) and diluted earnings per share of 8.5p (2000: 27.1p). The current year results include the earnings of BioChem from the acquisition date and costs of £8.0 million in respect of the restructuring of the Group's operations following the acquisition of BioChem in May 2001.

The Group manages and controls the business on geographic and functional lines. The three reportable segments are the US, international and global research & development. Additional information regarding segments is provided in note 2 to the consolidated financial statements.

### **Turnover**

For the year ended 31 December 2001, turnover increased by 69% to £580.4 million. 29% of the £236.7 million increase in turnover was a result of the BioChem acquisition. The remaining growth was primarily the result of an increase in product sales. Product sales in the US continue to represent a significant percentage of worldwide product sales, 84% in 2001 versus 80% in 2000.

### **Product sales**

For the year ended 31 December 2001, total product sales increased by 54% to £508.6 million, compared to £330.8 million in the prior year. Of the Group's total product sales, 48% related to ADDERALL XR and ADDERALL, the Group's products marketed in the US for the treatment of ADHD. On a combined basis, these products increased their share of the total US ADHD prescriptions written from 33.0% in December 2000 to 34.4% in December 2001.

Sales of AGRYLIN, the only US product marketed for the treatment of essential thrombocythemia, grew by 55% to £59.6 million (2000: £38.4 million). Shire achieved a 24.4% share of the total US AGRYLIN, Hydrea and generic hydroxyurea prescription market in December 2001, compared to 18.8% in December 2000.

Sales of PENTASA, for the treatment of ulcerative colitis, increased by 45% to £52.5 million. PENTASA had a prescription share of 18.6% of the US oral mesalamine/olsalazine market in December 2001, compared with 18.0% in December 2000.

PROAMATINE, for the treatment of postural hypotension, achieved sales of £26.4 million, 67% higher than 2000 sales of £15.8 million. The US market for PROAMATINE and Florinef prescriptions showed PROAMATINE had a 23.6% market share for the month of December 2001, an increase from 21.7% in December 2000.

## Financial review (continued)

CARBATROL, containing carbamazepine for the treatment of epilepsy, increased its share of total US extended release carbamazepine prescriptions written to 35.5% in December 2001 from 30.9% in December 2000. Sales of £25.6 million, were up 50% on the prior year (£17.1 million).

### **Royalties**

For the year ended 31 December 2001, royalty income increased by £63.4 million to £66.1million, representing 11% of total turnover. In the prior year, royalty income represented less than 1% of total turnover. This change in the constitution of total turnover is largely due to the acquisition of BioChem. The Group receives royalties on the worldwide sales of 3TC\* and ZEFFIX\* from GlaxoSmithKline (GSK), with the exception of Canada where a partnership with GSK has been established. Royalty income in 2001 also included royalties on sales of REMINYL, Shire's Alzheimer's drug, received from Johnson and Johnson.

### **Cost of sales and operating expenses**

For the year ended 31 December 2001, cost of sales amounted to 16% of product sales as compared to 18% in 2000. The decrease in cost of sales percentage and corresponding increase in gross margin is largely attributable to a change in the product mix. The higher margin products, ADDERALL XR, ADDERALL and AGRYLIN, represented a higher proportion of total sales in 2001 (60%) compared to the prior year (54%). Price increases in respect of the ADHD franchise have also enhanced the gross margin during the current year.

Research and development expenditure increased from £54.4 million in 2000 to £103.8 million in 2001, representing an overall increase of 91%. As a percentage of turnover, research and development costs were 18% (2000: 16%).

Other operating expenses (excluding research and development) increased by £166.1 million from £150.9 million in 2000 to £317.0 million in 2001. A significant component of these expenses are depreciation and amortisation. The Group recorded charges totalling £118.3 million for depreciation and amortisation in the year ended 31 December 2001 (2000: £36.1 million). This increase is largely attributable to the amortisation charged in respect of the BioChem acquisition during the current year (£73.2 million). Distribution costs were £147.4 million for the year ended 31 December 2001 (2000: £79.6 million) and represented 29% of total product sales (2000: 24%). This increase is primarily the result of the high level of promotional spend associated with the ADDERALL XR launch in 2001.

### **Interest income and expense**

In the year ended 31 December 2001 the Group received interest income of £13.1 million compared with £4.1 million in 2000. Interest expense increased from £7.0 million to £8.1 million.

### **Taxation**

For the year ended 31 December 2001, the tax charge increased by £39.6 million to £45.7 million. The Group's effective tax rate for 2001 was 56%. This compares to a tax rate of 8% for 2000. The effective tax rate for 2001 is higher than the statutory UK tax rate of 30% mainly due to the non deductibility of goodwill amortisation resulting from acquisitions of subsidiaries. With the acquisition of BioChem in 2001, the impact of non deductible amortisation is significantly greater compared with 2000. The effective rate in 2000 was particularly low due mainly to the deductibility

\* Trademarks of GSK



## Financial review (continued)

of non qualifying stock options exercised in the US following the acquisition of Roberts Pharmaceutical Corporation (Roberts). A reconciliation of the current tax charge for 2000 and 2001 to the profit before tax for those years at the statutory tax rate of 30% is given in note 7.

In 2001, the Group has adopted FRS19 (Deferred taxation), which requires full provision for deferred tax as detailed in accounting policy note 1(h). As this is a change of accounting policy, the tax comparatives for 2000 have been restated. If FRS19 had not been adopted the tax charge for 2001 would have been £44.9 million (£3.6 million for 2000).

### **Cash flow**

For the year ended 31 December 2001 net cash inflow from operating activities amounted to £202.9 million compared to £52.9 million in 2000.

### **Seasonality and foreign exchange**

Shire's financial results, quarter to quarter, may be materially influenced by, among other things, the timing of license fees, milestone payments, phasing of research and development costs and seasonal factors. Third quarter sales of ADHD products have traditionally been slow due to the withdrawal of many children from therapy during the school summer vacation.

The Group's results are exposed to variations in exchange rates as a number of the Group's principal subsidiary operations are located outside of the UK. As such, the consolidated financial results are subject to fluctuations in exchange rates, principally the conversion of US dollars and Canadian dollars into sterling. The financial statements of foreign entities are translated using the accounting policies described in note 1 of the consolidated financial statements. The exposure to foreign exchange market risk is managed by the Group's treasury function, using forecasts provided by the operating units.

### **Balance sheet and treasury management**

#### **Net assets**

The consolidated net assets of the Group increased by £2,568.0 million to £3,393.9 million at 31 December 2001. The increase reflects the acquisition of BioChem in May 2001, which was effected through an exchange of shares.

#### **Liquidity and capital resources**

The Group has financed its operations since inception through private and public offerings of equity securities, the issuance of loan notes and convertible notes, collaborative licensing and development fees, product sales and investment income. The Group's funding requirements depend on a number of factors, including the Group's product development programmes, business and product acquisitions, the level of resources required for the expansion of marketing capabilities as the product base expands, increased investment in trade debtors and stock levels which may arise as sales levels increase, competitive and technological developments, the timing and cost of obtaining required regulatory approvals for new products, and the continuing revenues generated from sales of key products.

## Financial review (continued)

As of 31 December 2001, the Group had cash and cash equivalents of £578.8 million (2000: £124.7million), which consisted of immediately available money market fund balances and investment grade securities.

### **Debt**

The Group had short-term and long-term debts outstanding as at 31 December 2001 totalling £272.9 million. These comprised the carrying value of the convertible loan notes issued during the year as detailed below (£268.2 million), the remaining convertible notes outstanding to Arenol Corporation (£1.0 million) and Canadian bank loans of £3.7 million.

On 15 August 2001, Shire Finance Limited, a wholly owned subsidiary, issued \$400 million (£275 million) in guaranteed convertible notes due 2011 with international institutional investors, which bear interest at the rate of 2% per annum. Issue costs of \$9 million (£6.8 million) were incurred, giving net proceeds to the Group of \$391 million (£268.2 million).

The convertible notes are guaranteed by the Company and are convertible into redeemable preference shares of the issuer, Shire Finance Limited, which upon issuance will be immediately exchanged for either (i) ordinary shares or (ii) American Depository Shares (ADS's) of Shire or, at the issuer's option, cash. Investors have the right, subject to certain conditions, to require the issuer to redeem the notes at par on 21 August 2004, 2006 or 2008. Subject to certain conditions, the convertible notes will be callable after 21 August 2004.

### **Concentration of credit risk**

Financial instruments that potentially expose the Group to concentrations of credit risk consist primarily of short-term cash investments and trade accounts receivable. As revenues are mainly derived from agreements with major pharmaceutical companies and relationships with drug distributors, and such clients typically have significant cash resources, any credit risk associated with these transactions is considered minimal. The Group operates credit evaluation procedures. Excess cash is invested in short-term money market instruments, including bank and building society term deposits and commercial paper from a variety of companies with strong credit ratings. These investments typically bear minimal risk.

### **Market risk**

Shire's principal treasury operations are managed by the Group's treasury function based in the UK in accordance with the Group's treasury policies and procedures which are approved by Shire's Board. As a matter of policy, Shire does not undertake speculative transactions that would increase its currency or interest rate exposure.

During the year the Group repaid in full a long-term loan of \$125 million (approximately £86 million) outstanding to Credit Suisse First Boston. The loan was subject to variable rates of interest that were, in part, dependent on the Group's credit rating. Thus, as at 31 December 2001 the Group's exposure to variable interest rate market risk on debts outstanding is much reduced.

The Group has short-term and long-term debt liabilities denominated in foreign currencies. As at 31 December 2001, a total of £3.7 million was outstanding where the underlying currency was Canadian dollars, and a total of £268.2 million (31 December 2000: £83.7 million) was outstanding where the underlying currency was US dollars.

## Financial review (continued)

The Group has cash and cash equivalents on which interest is earned at variable rates. The Group's strategy is, wherever possible, to minimise exposure to interest rate and foreign exchange risk.

### **Capital commitments**

The Company has signed a ten-year contract with the Government of Canada to assure a state of readiness in the case of an influenza pandemic (worldwide epidemic) and to manufacture influenza vaccine for all Canadians in such an event. Under the contract, Shire Biologics will also supply the Government of Canada with a substantial proportion of its annual influenza vaccine requirements over the ten-year period. The value of the agreement may exceed CAN\$300 million over the ten year term, with an option for the Government of Canada to extend the contract period.

The concept of a state of readiness against an influenza pandemic requires the development of sufficient infrastructure and capacity in Canada to provide 100% of domestic vaccine needs in the event of an influenza pandemic. Canada would require 32 million doses of single-strain (monovalent) flu vaccine within a production period of 16 weeks. Shire Biologics will therefore begin expanding its current production capacity in order to meet this objective within a five-year period.

Shire Biologics is committed to £1.9 million (CAN\$4.5 million) of capital expenditure on immovables for the purpose of achieving the level of pandemic readiness required. In addition a performance bond equal to 10% of the minimum estimated contract value in any year would become payable to the Government of Canada if contracted penalty clauses were triggered.

### **The Euro**

On 1 January 1999, the European Economic and Monetary Union (the EMU) introduced the Euro as the official currency of the 11 participating member countries. On that date, the currency exchange rates of the participating countries were fixed against the Euro. There is a three year transition to the Euro, and at the end of 2001 the currency came into circulation. National currencies will be withdrawn by July 2002.

The UK did not participate in the EMU at the commencement of the third stage on 1 January 1999 and it is uncertain whether or on what terms the UK would be permitted to join at a later date. There can be no prediction as to whether the UK will participate in the EMU or as to the rate at which the pound sterling would be converted into the Euro. Furthermore, there can be no prediction as to the likely impact on the US dollar/sterling exchange rate of a decision by the UK to participate in the EMU. It is anticipated that the pricing of goods and services will be more transparent through the use of a single currency within the participating member states. Competition is likely to increase with the greater price transparency and removal of exchange rate risk. In the longer term more general price convergence is likely, assuming the EMU leads to greater harmonisation of healthcare policies across the participating member states. Shire has sales and marketing subsidiaries in the Republic of Ireland, France, Germany, Spain and Italy and therefore there may be some impact on the Group's business and competitive position as a result of the increased price transparency.

The Group has reviewed its financial and operating systems and is satisfied that the introduction of the Euro has not caused any disruption to the business, and that the systems are in place to receive and make payments in Euros.

## Financial review (continued)

Shire will continue to monitor the UK's stance in relation to participation in the Euro and assess the impact of any significant changes in policy.

**Angus Russell**  
Group Finance Director

## Board of Directors

### **Dr James Cavanaugh (65)**

#### **Chairman and non-executive Director**

Joined the Board on 24 March 1997 and was appointed as Non-executive Chairman with effect from 11 May 1999. Dr Cavanaugh is the President of HealthCare Ventures LLC and is also on the Board of 3-Dimensional Pharmaceuticals Inc. Formerly he was President of SmithKline & French Laboratories, the US pharmaceutical division of SmithKline Beecham Corporation. Prior to that, he was President of SmithKline Beecham Corporation's clinical laboratory business and, before that, President of Allergan International. Prior to his industry experience, Dr Cavanaugh served as Deputy Assistant to the President of the US for Health Affairs on the White House Staff in Washington, DC. He is a non-executive director of MedImmune Inc., Diversa Corporation and Versicor Inc.

### **Mr Rolf Stahel (57)**

#### **Chief Executive**

Joined the Group in March 1994 as Chief Executive from Wellcome plc where he worked for 27 years in Switzerland, Italy, Thailand, Singapore and the UK. As Regional Director based in Singapore, Mr Stahel was responsible for 18 Pacific Rim countries. From April 1990 until February 1994, he served as Director of Group Marketing reporting to the Chief Executive. A business studies graduate of KSL Lucerne, Switzerland, he attended the 97th Advanced Managers Program at Harvard Business School. On 15 March 2001 Mr Stahel received the Chief Executive Officer of the Year Award 2001 for the global pharmaceutical industry.

### **Mr Angus Russell (45)**

#### **Group Finance Director**

Joined Shire on 13 December 1999 as Group Finance Director. Mr Russell worked for ICI, Zeneca and AstraZeneca for a total of 19 years. His last position was Vice President - Corporate Finance at AstraZeneca PLC, where he was responsible for financial input into M&A activities, management of tax, legal and finance structure, investor relations activities and the management of various financial risks. Prior to this, he held a number of positions within Zeneca Group PLC from 1993 until 1999, including Group Treasurer, and before that in ICI from 1980 until 1992. Mr Russell is a chartered accountant, having qualified with Coopers & Lybrand and is a fellow of the Association of Corporate Treasurers.

### **Dr Wilson Totten (46)**

#### **Group R&D Director**

Joined Shire in January 1998 as Group Research and Development Director. Dr Totten is a medical doctor and has wide experience in the pharmaceutical industry covering all phases of drug development. He has substantial experience in the field of central nervous system disorders. His last position was Vice President of Clinical Research & Development with Astra Charnwood where he served from 1995 to 1997, having previously worked for Fisons Pharmaceuticals from 1989 to 1995, and prior to that with 3M Health Care and Eli Lilly. He is a Non-executive Director of Keryx Biopharmaceuticals Inc.

## Board of Directors (continued)

### **Dr Francesco Bellini (54)**

#### **Non-executive Director**

Joined the Board on 11 May 2001 as a non-executive director. Dr Bellini is Chairman of Picchio International Inc. and is also on the board of several companies and organisations such as Molson Inc. and Industrial-Alliance Life Insurance Co. Formerly, he was Chairman and CEO of BioChem Pharma which he co-founded in 1986.

### **Dr Bernard Canavan (66)**

#### **Non-executive Director (Chairman Audit Committee)**

Joined the Board as a non-executive director on 11 March 1999. Dr Canavan is a medical doctor. He was employed by American Home Products for over 25 years until he retired in January 1994. He was President of that corporation from 1990 to 1994, and prior to that was Chairman and Chief Executive Officer of American Home Products, Pharmaceutical Division, Wyeth-Ayerst Laboratories. Dr Canavan is a director of Genaera Corporation. Dr Canavan is Chairman of the Audit Committee.

### **The Hon James Andrews Grant (64)**

#### **Non-executive Director**

Joined the Board on 11 May 2001 as a Non-executive Director. He was formerly a Director of BioChem since 1986, and is a partner with the law firm of Stikeman Elliot in Montreal. Mr Grant, who also sits on the boards of several other prominent Canadian corporations, attended McGill University receiving a B.A. in arts in 1958 and a B.C.L in Law in 1961.

### **Mr Ronald Nordmann (60)**

#### **Non-executive Director**

Joined the Board on 23 December 1999 having previously served as a non-executive director of Roberts Pharmaceutical Corporation since May 1999 and has been a financial analyst in healthcare equities since 1971. From September 1994 to January 2000 he was an analyst and partner at Deerfield Management. He has held senior positions with PaineWebber, Oppenheimer & Co., F Eberstadt & Co., and Warner-Chilcott Laboratories, a division of Warner-Lambert. Mr Nordmann received his undergraduate degree from The Johns Hopkins University and an MBA from Fairleigh Dickinson University. Mr Nordmann is also a director of Guilford Pharmaceuticals Inc., Global Health Associates, LLC and Boron, LePore & Associates Inc.

### **Dr Barry Price (58)**

#### **Senior non-executive Director (Chairman Remuneration Committee)**

Joined the Board on 24 January 1996 having spent 28 years with Glaxo holding a succession of key executive positions with Glaxo Group Research. He is Chairman of Antisoma plc and also Biowisdom Ltd. He is also on the board of directors of Pharmagene plc. Dr Price is Chairman of the Remuneration Committee.

## Board of Directors (continued)

### **Mr Gérard Veilleux (59)**

#### **Non-executive Director**

Joined the board on 11 May 2001 as a non-executive director. He was formerly a director of BioChem since 1999. He is President of Power Communications Inc. and Vice President of Power Corporation, a diversified management and holding company. Mr Veilleux is a director of several public and private companies as well as a member of the Board of Governors of McGill University. He has a Masters degree in Public Administration from Carleton University and a Bachelor of Commerce from Laval University.

## Directors' Report

For the year ended 31 December 2001

The Directors present their report on the affairs of the Group and the Company together with the audited consolidated financial statements for the year ended 31 December 2001.

### Results and dividends

Profit on ordinary activities before taxation of the Group was £81,377,000 (2000: £76,772,000). Movements in reserves are set out in note 24 to the consolidated financial statements.

The Directors do not recommend the payment of a dividend. As at 31 December 2001, the Company had an accumulated deficit of £2.7 million. Future dividend policy will be dependant upon distributable profits, the financial condition of the Company and the terms of any then existing debt facilities and other relevant factors existing at that time. The Group has no intention of paying a dividend to shareholders in the near future.

### Principal activity

The principal activity of the Group is the marketing, research and development of prescription medicines. The Group focuses on three therapeutic areas: central nervous system disorders, oncology and anti-infectives supported by two platform technologies: Advanced Drug Delivery and Biologics.

### Business review

A review of the Group's business and important events during the year and likely future developments is set out in the Chairman's review, the Chief Executive's review and the Financial review on pages 2 to 11.

### Corporate governance

The Directors are committed to business integrity and professionalism and as an essential part of this commitment the Board supports high standards of corporate governance. Details concerning the Group's arrangements relating to corporate governance and its compliance with the Combined Code of Best Practice are given on pages 20 to 23 and the remuneration policy contained in the Remuneration Report is detailed on pages 24 to 37.

### Authorised and called up share capital

Details of the authorised and called up share capital of the Company as at 31 December 2001 and the changes during the year are set out in note 23 to the consolidated financial statements.

### Research and development

The Group continues an active research and development programme and as a result has incurred research and development costs of £103,826,000 in the financial year ended 31 December 2001 (31 December 2000: £54,427,000), which have been charged to the consolidated profit and loss account in accordance with the Group's accounting policy.



## Directors' Report (continued)

For the year ended 31 December 2001

### Directors

The directors who served during the year were as follows:

**Dr James Cavanaugh**, Chairman and Non-executive Director

**Mr Rolf Stahel**, Chief Executive

**Mr Angus Russell**, Group Finance Director

**Dr Wilson Totten**, Group R & D Director

**Dr Barry Price**, Senior Non-executive Director (Chairman of the Remuneration Committee)

**Dr Francesco Bellini**, Non-executive Director

Appointed 11 May 2001

**Dr Bernard Canavan**, Non-executive Director

(Chairman of the Audit Committee)

**The Hon James Andrews Grant**, Non-executive Director

Appointed 11 May 2001

**Dr Zola Horovitz**, Non-executive Director

Resigned 11 May 2001

**Mr Ronald Nordmann**, Non-executive Director

**Mr Joseph Smith**, Non-executive Director

Resigned 11 May 2001

**Mr John Spitznagel**, Non-executive Director

Resigned 11 May 2001

**Mr Gerard Veilleux**, Non-executive Director

Appointed 11 May 2001

## Directors' Report (continued)

For the year ended 31 December 2001

### Directors' interests

Details of the current Directors' interests in the share capital of the Company, as shown in the register maintained in accordance with Section 325 of the Companies Act 1985, together with the details of the share options granted to them are disclosed in the Remuneration Report on pages 24 to 37.

### Re-appointment

In accordance with the Company's Articles of Association, Dr James Cavanaugh, Dr Barry Price and Mr Ronald Nordmann retire by rotation and offer themselves for re-appointment.

### Interest in material contracts

Other than the related party transactions disclosed below, none of the current Directors had a material interest in any contract of significance to which the Company or any of its subsidiary undertakings was a party during the period under review.

### Related party transactions

a) Mr Spitznagel, a former Director of the Company who resigned during the year, entered into a consultancy agreement with the Company in December 1999, which provided that;

- (i) If he had good reason, as defined in his service agreement with Roberts, to terminate his employment with Roberts under his service agreement, the Company would cause Roberts to provide him with the payments and benefits he would be entitled to upon a 'good reason' termination.
- ii) Mr Spitznagel would provide consulting services to the Company for at least 42 months following the acquisition of Roberts, unless Mr Spitznagel terminated the consultancy agreement prior to the end of the 42<sup>nd</sup> month upon 30 days notice; and
- iii) The Company would pay Mr Spitznagel at a rate of £248,000 per annum for his consulting services, £93,000 per annum as an office holder, £155,000 per annum to comply with certain restrictive covenants contained therein and £93,000 per annum for tax, financial and estate planning advice, life insurance and health insurance.

b) Prior to the acquisition of BioChem, Dr Bellini entered into an agreement with BioChem whereby BioChem granted to Dr Bellini an option to purchase from BioChem its interest in a company that owned land and buildings located on Province Island, Quebec for the fair market value of CAN\$ 225,000. Dr Bellini exercised his option and the transaction was completed in accordance with the terms of the option agreement on 29 November 2001.

c) The Group incurred professional fees with a Canadian law firm in which The Hon James Andrews Grant is a partner, totalling £41,000 for the year ended 31 December 2001.

d) BioChem Immunosystems Inc (Immunosystems), formerly a wholly owned subsidiary of BioChem was sold in February 2000 to a third party. Dr Bellini, the former Chief Executive officer of BioChem, continues as a director of Immunosystems. In December 2001, Shire acquired a 19.9% equity interest in Immunosystems in consideration for

## Directors' Report (continued)

For the year ended 31 December 2001

the release of a debt owing to Shire from Immunosystems. This debt existed prior to the BioChem acquisition. As part of the same transaction, Shire was released from a pre-existing BioChem guarantee over other Immunosystems' liabilities.

### **Directors' and Officers' liability insurance**

In the year under review, the Company and the Group maintained an insurance policy for its Directors and Officers in respect of liabilities arising out of any act, error or omission whilst acting in their capacity as Directors or Officers.

### **Substantial shareholdings**

No information has been disclosed to the Company pursuant to Sections 198 to 208 of the Companies Act 1985 regarding any holding in the ordinary share capital of Shire Pharmaceuticals Group plc exceeding 3% at 12 April 2002, except that The Capital Group of Companies, Inc. (including its affiliates) have a holding of 8.00 % and Putnam Investment Management, LLC & The Putnam Advisory Company, Inc. together have a holding of 3.19 %.

### **Political donations**

During the year the Group made a political donation of approximately £3,000 to a non-EU political party.

### **Charitable contributions**

During the year, charitable contributions amounting to £85,480 were made. The contributions were primarily to charitable medical foundations and the arts.

### **Employee involvement**

As at 31 December 2001, the Group employed 1,677 personnel, 247 of whom were based in the UK.

The Group places considerable value on the involvement of its employees and constantly seeks to develop employee involvement throughout the Group. Employees are kept informed on matters affecting the Group's performance and on matters that concern them as employees. The Group communicates with its employees by routinely circulating details and announcements concerning the Group's performance, informing them of policies and guidelines that may affect them, and holding regular briefing meetings. The Group publishes an employee newsletter and information brochure to which employees have an opportunity to contribute. The Group also operates various employee share schemes, details of which are set out in the Remuneration Report on pages 24 to 37.

The Group's employment policies are developed to reflect local legal, cultural and employment requirements and to maintain high standards wherever the Group operates. Employees at all levels within the Group are encouraged to make the best possible contribution to the Group's success.

### **Equal opportunities**

The Group operates an equal opportunities policy that aims to treat individuals fairly and not to discriminate on grounds of sex, race, ethnic origin or disability. Applications for employment, including those by disabled persons, are fully considered on their merits, and employees are given appropriate training and equal opportunities for career development and promotion.

## Directors' Report (continued)

For the year ended 31 December 2001

### **Disabled employees**

Applications for employment by disabled persons are always fully considered, bearing in mind the aptitudes of the applicant concerned. In the event of members of staff becoming disabled, every effort is made to ensure that their employment with the Group continues and that appropriate training is arranged. It is the policy of the Group that the training, career development and promotion of disabled persons should, as far as possible, be identical to that of other employees.

### **Health, safety and welfare**

The Directors are committed to ensuring the health, safety and welfare of the Group's employees at work. Accordingly, it is the Group's policy to manage its activities so as to avoid causing any unnecessary or unacceptable risk to employees and those who may be affected by the Group's business.

### **Payment of creditors**

It is the Company's policy, also adopted by the Group, to agree payment terms with its suppliers, making sure the supplier is aware of those terms, and to abide by them. As at 31 December 2001 there were 36 trade creditors days outstanding, (31 December 2000: 46 days).

### **Annual General Meeting**

The Notice convening the Annual General Meeting to be held on 13 June 2002 at 11am can be found in a separate notice accompanying the Annual Report.

### **Auditors**

A resolution proposing the re-appointment of Arthur Andersen as auditors to the Company will be put to the Annual General Meeting in accordance with Section 384 of the Companies Act 1985. The Audit Committee reviews both the level of the audit fee and the level and nature of non-audit fees as part of its review of the adequacy and objectivity of the audit process.

### **Recommendation**

The Directors have considered Resolutions 1 to 10 which deal with, inter alia, the proposals relating to the Employee Stock Option Plan, authority to make market purchases, authority to allot shares and disapplication of pre-emption rights to be put to shareholders and believe they are in the best interests of shareholders as a whole and accordingly recommend that shareholders vote in favour of them at the Annual General Meeting as they intend to do in respect of their aggregated beneficial holdings of 15,552,722 ordinary shares, representing approximately 3.22% of the issued share capital of the Company.

By order of the Board,

Tatjana May  
Company Secretary

12 April 2002

## Corporate governance statements

### **The Company is committed to high standards of corporate governance**

The Combined Code on Corporate Governance appended to the Listing Rules of the Financial Services Authority requires companies listed on the London Stock Exchange to make a disclosure statement on its application of the principles of and compliance with the provisions of good governance set out in the Combined Code. Throughout the period under review the Company has been committed to high standards of corporate governance and always sought to comply fully with the provisions of the Combined Code and has, in the directors' opinion, done so.

### **The Board**

The Board meets at least four times a year and comprises three executive and seven non-executive directors and the meetings are well attended. The Board seeks to provide effective leadership and the control required for a listed company and in so doing has formally reserved specific matters to itself for determination. Specific powers and authorities are also delegated to an Executive Committee and to various other Board committees set out below.

Four of the non-executive directors (Dr Barry Price, Dr Bernard Canavan, Mr Ronald Nordmann and Mr Gerard Veilleux) are viewed as independent of management and free from any business or other relationship which could materially interfere with the exercise of their independent judgement.

Whilst the Company views Dr James Cavanaugh, Dr Francesco Bellini and The Hon James Andrews Grant as independent non-executive directors, the Company does accept that on a strict interpretation of the Combined Code the interests that Dr Cavanaugh has as President of HealthCare Ventures LLC and the position The Hon James Andrews Grant has as a partner of Stikeman Elliot, a law firm retained by BioChem prior to the merger, prevents the strict application of independence. The same is also relevant to Dr Francesco Bellini by virtue of the executive directorship that Dr Bellini held with BioChem.

All directors have access to the advice and guidance of the Company Secretary and are encouraged to seek independent advice at the Company's expense, where they feel it is appropriate. No such independent advice has been sought. The Board is confident that all its members have the knowledge, aptitude and experience to perform the functions required of a director of a listed company.

Biographical details of the Board are shown on pages 12 to 14.

### **Chairman and Chief Executive**

The offices of Chairman and Chief Executive are held separately. The non-executive Chairman, Dr James Cavanaugh, is responsible for the conduct of the Board and ensures that Board discussions are conducted in such a way that all views are taken into account, so that no individual director or small group of directors dominates proceedings. The Chief Executive, Mr Rolf Stahel, is responsible for running the business and chairs the Executive Committee.

### **Senior non-executive director**

Dr Barry Price is the nominated senior independent non-executive director.

## Corporate governance statements (continued)

### Supply of information

The executive directors and the Company Secretary are responsible for ensuring that detailed information is provided to the Board at least one week before any scheduled meeting of the Board. Before decisions are made, consideration is given to the adequacy of information available to the Board and, if necessary, decisions are deferred if further information is required.

### Re-appointment

Non-executive directors are appointed for a maximum period of two years. Re-appointment of non-executive directors following the expiry of such two-year period is subject to Board approval.

### Committees of the Board

The standing Board committees are the Audit Committee, the Remuneration Committee, the Nomination Committee and the Executive Committee. Each committee has its own written terms of reference that have been approved by the Board. Details of each committee are as follows:

- i) **The Audit Committee** is chaired by Dr Bernard Canavan and usually meets on four occasions in the year. Other members of the Committee are Dr James Cavanaugh, Dr Barry Price and Mr Ronald Nordmann. Under its terms of reference the Committee is required, amongst other things, to review the scope and extent of the internal audit programme, to monitor the relationship with external auditors, to review the Company's statutory accounts and other financial statements and information, to monitor compliance with statutory and listing requirements for any exchange on which the Company's shares are quoted, to review the business risks faced by the Company and to initiate special projects or investigation as it sees fit.
- ii) **The Remuneration Committee**, under the chairmanship of Dr Barry Price, usually meets three times a year. Dr James Cavanaugh, Dr Bernard Canavan and Mr Gerard Veilleux are the other members of this Committee. The remuneration of non-executive directors is determined by the Chief Executive together with the executive directors. The Remuneration Report appears on pages 24 to 37 and provides further information on this Committee.
- iii) **The Nomination Committee** has been delegated with responsibility for nominations to the Board. This Committee meets as required and is chaired by Dr James Cavanaugh; Mr Rolf Stahel and Mr Ronald Nordmann also serve on this Committee. The Committee provides a formal and transparent procedure for the appointment of new directors to the Board.
- iv) **The Executive Committee** has the day-to-day management of the Company delegated to it by the Board and operates within clear and formal parameters. Mr Rolf Stahel is the Chairman of the Committee, which consists of nine senior executives including the three executive directors. The Executive Committee reports to and seeks guidance from the Board on a regular basis.

### Directors' remuneration

The Company's remuneration policy appears on page 24. The policy details the level of remuneration for directors and the basis upon which executive remuneration is fixed.

## Corporate governance statements (continued)

### **Relations with shareholders**

The Company is committed to maintaining good relations with shareholders through the provision of regular interim and annual reports and other trading statements. The Company also arranges individual and group meetings with its institutional shareholders in order to discuss relevant communications to ensure that the investing community receives a balanced and complete view of the Company's performance and issues faced by the business. The Company holds its Annual General Meeting in London and all shareholders are given the opportunity to ask questions of the Board.

The Company's website at [www.shire.com](http://www.shire.com) provides Company information and is regularly updated.

### **Balanced and understandable assessment of positions and prospects**

The Company strives to give full, timely and realistic assessments of matters that impact on its business and financial position and to present scientific and other price-sensitive data in a balanced way. Before it was required under SEC rules, the Company voluntarily adopted quarterly financial reporting, which is not obligatory in the UK.

### **Financial reporting**

The Board has ultimate responsibility for the preparation of accounts and for the monitoring of systems of internal financial control. The Board strives to present a balanced and understandable assessment of the Company's position and its prospects and endeavours to present scientific and other price-sensitive information in a balanced way. The Company publishes quarterly financial reports so that its shareholders can monitor the Company's financial position regularly.

On behalf of the Board, the Audit Committee examines the effectiveness of systems of internal financial control on a regular basis. This includes considering independent access to the Auditors throughout the year in addition to presentations from the Auditors on a quarterly basis. Any significant findings or identified risks are closely examined and are reported to the Board with recommendations for action.

### **Internal control**

In applying the principle that the Board should maintain a sound system of internal control to safeguard shareholders' investment and the Company's assets, the directors recognise that they have overall responsibility for the Company's system of internal control and for reviewing its effectiveness.

The directors believe that the Company has applied this principle during the year under review. However, there are limitations in any system of internal control and accordingly even the most effective system can provide only reasonable and not absolute assurance. Such a system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Company has an ongoing process for identifying, evaluating and managing the significant risks that it faces. This process has been in operation throughout the period under review. In particular, the Executive Committee, the Audit Committee and the Board have reviewed the schedule of risks faced by the Company. This includes analysis of the

## Corporate governance statements (continued)

impact of the operation of key risks and the action being taken to avoid or reduce each risk. In particular, the schedule of risks allocates responsibility for management of each key risk to senior executives.

These reviews, together with regular reports on financial performance, represent the main elements in establishing the effectiveness of the system of internal control. In addition, the Company has a system of control procedures and compliance with these procedures is monitored through a system of internal review. Any significant issues arising are reported to the Board for review.

During the year, the Audit Committee has considered how it can obtain assurance that risks continue to be managed effectively following the increase in the extent of operations worldwide. In November, proposals were agreed by the Audit Committee for the establishment of an independent outsourced risk assurance and internal audit function. This service will not be provided by the auditors, Arthur Andersen, and will commence in 2002.

### **Audit Committee and auditors**

The Board has, through the Audit Committee, established formal and transparent arrangements for financial reporting, internal control and external auditing. All employees can raise any concerns in these areas with the Chairman of the Audit Committee in the strictest confidence. The Audit Committee's terms of reference have been extended to cover the Group's risk management activities as a whole and not just the financial aspects of internal control. The Audit Committee reviews the scope and results of the audit and non-audit services, the cost effectiveness and the independence and objectivity of the auditors.

### **Shire in the community**

The Company recognises that business activities have an influence on the community and accepts that it has a duty to carry these out in a responsible manner. The continual ongoing development and implementation of the Company's environmental policy reflects the key activities of the Company at each of its office sites, production sites and suppliers' sites. This has enabled the Company to measure its performance now and in the future. The Company's commitment to the community has already led to the Company being included in the FTSE4Good index.



## The Remuneration Report

The Company has applied the Principles of Good Governance relating to the directors' remuneration and has complied with the provisions of the Code of Best Practice as set out below and as disclosed in the Corporate governance statements.

### **The Committee**

The Remuneration Committee (the Committee) comprises four non-executive directors: Dr James Cavanaugh, Dr Bernard Canavan, Mr Gérard Veilleux, and is chaired by Dr Barry Price. The Chief Executive attends meetings of the Committee at its invitation.

### **Remuneration policy**

The Committee's policy on the remuneration of executive directors is directed at the retention and motivation of executive directors by ensuring that their remuneration is competitive with companies within the sector of specialty pharmaceutical companies, taking into account the interests of shareholders.

The Committee meets regularly and acts within agreed terms of reference. In developing remuneration policy and fixing remuneration, consideration is given to salary data of directors of comparable companies of a similar size in the industry generally and, more specifically, in the specialty pharmaceuticals sector. The Chief Executive also advises the Committee on other executive remuneration and on individual performance. External agencies are also used to advise on levels of remuneration as appropriate. No director is involved in determining his own remuneration. The Committee regularly reviews the procedures and criteria for determining remuneration policy.

### **Annual bonuses**

The annual bonuses payable to executive directors are established on the basis of objectives for the Group and personal objectives. They include measurable and quantitative criteria related to financial performance. For the year ended 31 December 2001 these included revenue and earnings targets. The maximum annual bonus for each executive director for the year ended 31 December 2001 was 55% of salary in respect of Mr Rolf Stahel, 50% in respect of Mr Angus Russell, and 50% in respect of Dr Wilson Totten.

### **Share options**

Details of the share option schemes are set out below and in note 23 to the consolidated financial statements. Except as mentioned below, none of the executive directors who served during the year were granted additional options under any of the Company's share option schemes in the year ended 31 December 2001.

Share options under the Sharesave Scheme (see note iii on page 36) are offered at a discount as permitted by paragraph 13.31 of the Listing Rules. Share options are not otherwise offered at a discount.

## The Remuneration Report (continued)

The following share options were granted to executive directors during the year:

Executive Director	Share Option Scheme	Date of Grant	Number of ordinary shares	Exercise price £
Mr Rolf Stahel	2000 Executive Scheme	05.06.01	126,492	12.57
	Sharesave Scheme	01.12.01	1,151	8.41
Dr Wilson Totten	2000 Executive Scheme	05.06.01	73,986	12.57
Mr Angus Russell	2000 Executive Scheme	05.06.01	69,213	12.57

Share options are granted to executive directors and senior executives as an incentive. The grant of options is wholly discretionary.

In granting share options, the Committee takes into account the advice and recommendations of the Chief Executive and individual salary levels and positions within the Group.

On 4 March 2002 the executive directors were granted share options under the 2000 Executive Scheme at a price of £5.065 per share. Mr Rolf Stahel, Mr Angus Russell and Dr Wilson Totten were granted 209,211, 114,474 and 122,368 options respectively.

### Retirement benefits

The Company contributes 10% of salary to the personal pension plans of the executive directors.

### Fees for non-executive directors

The Board determines the remuneration of each of the non-executive directors.

Except as detailed on page 31, non-executive directors do not participate in any of the Company share schemes or other employee benefit schemes. Certain non-executive directors hold share options relating to their service with companies that have been acquired or merged with Shire whose policy was to grant share options to such individuals. No options have been granted to non-executive directors in their capacity as non-executive directors of Shire.

### Long Term Incentive Plan

#### i) Structure

The Long Term Incentive Plan (the Plan) was adopted at the Company's Annual General Meeting on 30 June 1998. Under the Plan, the Company may at any time, with the approval of the Committee, grant, or request that trustees grant, an award to any full-time employee of any member of the Group.

## The Remuneration Report (continued)

### ii) Eligibility

An award may be made to any full-time employee (including a director who is also such an employee) of a member of the Group on the terms set out in the Plan and upon such other terms as the Board (or a committee appointed by the Board) may specify, provided that no award may be granted to an employee who is within two years of his contractual retirement age.

Directors were granted an award under the Plan (as a “conditional allocation”, as defined in the Plan) in respect of the total number of ordinary shares in the Company, upon the terms set out in the Plan, as follows:

	Date of award	Value of award at grant date £'000	Total number of ordinary shares	Earliest date on which an award can be made
Mr Rolf Stahel	05.06.01	246	21,081	06.06.05
Dr Wilson Totten	05.06.01	144	12,330	06.06.05
Mr Angus Russell	05.06.01	124	11,535	06.06.05

### Service contracts

No director has a notice period of more than 12 months. Non-executive directors have been appointed for a fixed two-year term which will not continue automatically. This applies in the current year to Dr James Cavanaugh, Dr Barry Price and Mr Ronald Nordmann who have all offered themselves for re-election.

### Related party transactions

Details relating to Mr John Spitznagel, a former director who served on the Board during the year, who entered into a consultancy agreement with the Company and Dr Francesco Bellini who exercised an option granted to him by BioChem, for the purchase of land, and who is also a director of Immunosystems in which the Group has an equity interest, and The Hon James Andrews Grant who is a partner of a Canadian law firm with which the Group incurred professional fees during the year, are given in the Directors' Report on pages 17 and 18.

## The Remuneration Report (continued)

### Directors' emoluments

	Compensation						Total	Gains on	Total	Gains on
	Salary	office	Bonus	Fees	Benefits	Pension	remuneration	exercise	remuneration	exercise of
	for loss of						Year to	of share	Year to	share
							31 December	options	31 December	options
Executive directors	£'000	£'000	£'000	£'000	£'000	£'000	2001	2001	2000	2000
							£'000	£'000	£'000	£'000
Mr Rolf Stahel	482	-	225	-	19	48	774	83	642	-
Mr Angus Russell	262	-	113	-	18	26	419	-	302	-
Dr Wilson Totten	288	-	110	-	21	29	448	-	322	-
	<u>1,032</u>	<u>-</u>	<u>448</u>	<u>-</u>	<u>58</u>	<u>103</u>	<u>1,641</u>	<u>83</u>	<u>1,266</u>	<u>-</u>
Non-executive directors										
Dr James Cavanaugh	-	-	-	42	-	-	42	-	35	-
Dr Barry Price	-	-	-	31	-	-	31	-	20	-
Dr Francesco Bellini	45	2,754	-	176	37	-	3,012	21,437	-	-
Dr Bernard Canavan	-	-	-	60	-	-	60	-	20	-
The Hon James										
Andrews Grant	-	-	-	19	-	-	19	413	-	-
Dr Zola Horovitz	-	-	-	7	-	-	7	-	20.5	322
Mr Ronald Nordmann	-	-	-	29	-	-	29	-	20.5	411
Mr Joseph Smith	-	-	-	7	-	-	7	-	20.5	-
Mr John Spitznagel	-	-	-	7	-	-	7	-	20.5	10,320
Mr Gerard Veilleux	-	-	-	21	-	-	21	72	-	-
	<u>45</u>	<u>2,754</u>	<u>-</u>	<u>399</u>	<u>37</u>	<u>-</u>	<u>3,235</u>	<u>21,922</u>	<u>157</u>	<u>11,053</u>
Total	<u>1,077</u>	<u>2,754</u>	<u>448</u>	<u>399</u>	<u>95</u>	<u>103</u>	<u>4,876</u>	<u>22,005</u>	<u>1,423</u>	<u>11,053</u>

Details of exercise of share options are disclosed on pages 28 to 29.

Non executive director remuneration is to / from the date of resignation / appointment.

## The Remuneration Report (continued)

### Directors' shareholdings\*

Directors who held office at the end of the year had interests in the share capital of the Company as follows:

	Notes	31 December 2001	31 December 2000 #
Dr James Cavanaugh	(i)	8,806,368	8,806,360
Mr Rolf Stahel	(ii)	23,684	13,827
Mr Angus Russell		-	-
Dr Wilson Totten	(iii)	-	-
Dr Barry Price		31,350	31,350
Dr Francesco Bellini	(iv)	6,486,708	6,486,708
Dr Bernard Canavan	(v)	28,032	3,000
The Hon James Andrews Grant	(vi)	4,551	4,551
Mr Ronald Nordmann		46,968	46,968
Mr Gerard Veilleux	(vii)	-	-

# Or date of appointment if later

\*All interests are beneficial unless otherwise stated.

### Notes

- i) Dr Cavanaugh is the President of HealthCare Ventures LLC, which is the management company for a number of limited partnerships which have interests in 8,690,090 ordinary shares. Dr Cavanaugh is also the beneficial owner of 116,278 ordinary shares.
- ii) On 4 September 2001 Mr Stahel exercised an option under the Shire Pharmaceuticals Sharesave Scheme to acquire 9,857 shares at the option price of £1.75 per share. On 4 March 2002 Mr Stahel purchased 19,000 ordinary shares at a price of £5.195 per share. As a result of this transaction Mr Stahel has an interest in 42,684 ordinary shares.
- iii) On 6 March 2002 Dr Totten purchased 6,061 ordinary shares at a price of £4.90 per share.
- iv) Dr Bellini on 14 September 2001 part exercised an option granted to him under the BioChem Stock Option Plan and acquired 1,500,000 shares at the option price of £2.23 per share. These shares were immediately sold at £9.93 per share. On 3 December 2001 Dr Bellini exercised a further 1,000,000 shares granted under the BioChem Stock Option Plan at the option price of £2.23 per share and these shares were sold on the same day at a price of £8.32 per share. The balance of this option being 913,550 shares was exercised on 4 December 2001 of which 613,550 shares were immediately sold at a price of £8.4183 per share. On 31 December 2001 Dr Bellini donated 300,000 shares from his beneficial holding in the Company to the Royal Institution for the Advancement of Learning at McGill University, Montreal, Canada. On 1 March 2002 Dr Bellini purchased 100,000 ordinary shares at a price of £5.29 per share. As a result of this transaction Dr Bellini has an interest in 6,586,708 ordinary shares.

## The Remuneration Report (continued)

- v) On 11 May 2001 Dr Canavan acquired 25,032 ordinary shares in the Company by virtue of his shareholding in BioChem pursuant to the terms of the merger with BioChem.
- vi) On 14 September 2001 The Hon James Andrews Grant exercised an option granted to him under the BioChem Stock Option Plan for 47,334 shares at the option price of £1.63 per share. All these shares were sold on the same day at a price of £10.36 per share.
- vii) On 13 November 2001 Mr Veilleux exercised options for 1,137 shares, 7,964 shares and 13,891 shares with option prices of £6.58, £6.58 and £6.60 per share respectively, these shares having been granted under the BioChem Stock Option Plan. All these shares were immediately sold at a price of £9.72 per share.

### **Directors' share options**

Directors and employees have been granted options over ordinary shares under the Shire Pharmaceuticals Group plc 2000 Executive Share Option Scheme (Parts A and B) (2000 Executive Scheme), the Shire Holdings Limited Share Option Scheme (SHL Scheme), the Pharmavene 1991 Stock Option Plan (SLI Plan), the Shire Pharmaceuticals Executive Share Option Scheme (Parts A and B) (Executive Scheme), the Shire Pharmaceuticals Sharesave Scheme (Sharesave Scheme), the Shire Pharmaceuticals Group plc Employee Stock Purchase Plan (Stock Purchase Plan), the Richwood 1993 and 1995 Stock Option Plans (SRI Plan), the Roberts Stock Option Plan (Roberts Plan) and the BioChem Stock Option Plan (BioChem Plan).

## The Remuneration Report (continued)

Director	Scheme	Notes	Number of ordinary shares				Exercise dates			
			At 1 January 2001 / on appointment	Granted	Exercised	Lapsed	At 31 December 2001	Exercise price	Earliest	Latest
Mr Rolf Stahel	SHL	(i)	89,840	-	-	-	89,840	£1.00	24.11.96	23.11.02
			89,840	-	-	-	89,840	£1.00	24.11.97	23.11.02
			89,840	-	-	-	89,840	£1.00	24.11.98	23.11.02
			90,160	-	-	-	90,160	£1.00	24.01.97	23.01.03
			90,160	-	-	-	90,160	£1.00	24.01.98	23.01.03
			90,160	-	-	-	90,160	£1.00	24.01.99	23.01.03
	Executive Scheme A	(ii)	13,761	-	-	-	13,761	£2.18	15.02.99	14.02.06
	Executive Scheme B	(ii)	329,095	-	-	-	329,095	£1.75	15.02.99	14.02.03
			81,918	-	-	-	81,918	£3.385	09.02.01	08.02.05
			54,189	-	-	-	54,189	£10.275	01.03.03	28.02.07
	2000 Executive Scheme B	(vii)	34,241	-	-	-	34,241	£12.80	03.08.03	02.08.10
		-	126,492	-	-	126,492	£12.57	05.06.04	04.06.11	
Sharesave	(iii)	9,857	-	(9,857)	-	-	£1.75	01.04.01	30.09.01	
		-	1,151	-	-	1,151	£8.41	01.12.04	31.05.05	
		<b>1,063,061</b>	<b>127,643</b>	<b>(9,857)</b>	<b>-</b>	<b>1,180,847</b>				
Dr Wilson Totten	Executive Scheme A	(ii)	8,862	-	-	-	8,862	£3.385	09.02.01	08.02.08
	Executive Scheme B	(ii)	141,138	-	-	-	141,138	£3.385	09.02.01	08.02.05
			25,000	-	-	-	25,000	£4,705	12.05.02	11.05.06
			16,995	-	-	-	16,995	£10.275	01.03.03	28.02.07
	2000 Executive Scheme B	(vii)	63,242	-	-	-	63,242	£12.80	03.08.03	02.08.10
			-	73,986	-	-	73,986	£12.57	05.06.04	04.06.11
	Sharesave	(iii)	1,139	-	-	-	1,139	£8.56	01.06.03	30.11.03
			<b>256,376</b>	<b>73,986</b>	<b>-</b>	<b>-</b>	<b>330,362</b>			

## The Remuneration Report (continued)

Director	Scheme	Notes	Number of ordinary shares				Exercise dates			
			At 1 January 2001 / on appointment	Granted	Exercised	Lapsed	At 31 December 2001	Exercise price	Earliest	Latest
Mr Angus Russell	Executive Scheme A	(ii)	4,181	-	-	-	4,181	£7.175	13.12.02	12.12.09
	Executive Scheme B	(ii)	45,819	-	-	-	45,819	£7.175	13.12.02	12.12.06
			6,422	-	-	-	6,422	£10.275	01.03.03	28.02.07
	2000 Executive Scheme B	(vii)	-	69,213	-	-	69,213	£12.57	05.06.04	04.06.11
	Sharesave	(iii)	1,971	-	-	-	1,971	£8.56	01.06.05	30.11.05
			<b>58,393</b>	<b>69,213</b>	-	-	<b>127,606</b>			
Dr Francesco Bellini	BioChem	(viii)	3,413,550	-	(3,413,550)	-	-	£2.23	14.05.01	16.12.01
			3,413,550	-	-	-	3,413,550	£7.12	14.05.01	28.01.07
			<b>6,827,100</b>	-	<b>(3,413,550)</b>	-	<b>3,413,550</b>			
The Hon James Andrews Grant	BioChem	(viii)	47,334	-	(47,334)	-	-	£1.63	14.05.01	17.09.01
			31,859	-	-	-	31,859	£2.08	14.05.01	18.06.02
			31,859	-	-	-	31,859	£1.25	14.05.01	16.06.03
			31,859	-	-	-	31,859	£1.24	14.05.01	26.06.04
			31,859	-	-	-	31,859	£2.50	14.05.01	06.06.05
			31,859	-	-	-	31,859	£6.26	14.05.01	04.06.06
			2,275	-	-	-	2,275	£6.20	14.05.01	05.05.07
			2,275	-	-	-	2,275	£6.94	14.05.01	20.04.08
			7,964	-	-	-	7,964	£5.70	14.05.01	10.06.09
			12,516	-	-	-	12,516	£6.58	14.05.01	22.05.10
			1,137	-	-	-	1,137	£6.58	14.05.01	23.05.10
			<b>232,796</b>	-	<b>(47,334)</b>	-	<b>185,462</b>			
Mr Gerard Veilleux	BioChem	(viii)	23,894	-	(13,891)	-	10,003	£6.60	14.05.01	18.07.09
			7,964	-	(7,964)	-	-	£6.58	14.05.01	22.05.10
			1,137	-	(1,137)	-	-	£6.58	14.05.01	23.05.10
			<b>32,995</b>	-	<b>(22,992)</b>	-	<b>10,003</b>			



## The Remuneration Report (continued)

The middle market price of the Company's ordinary shares was £8.60 as at 31 December 2001. The high and low mid-market prices during the year to 31 December 2001 were £13.39 and £8.15 respectively.

Except as disclosed above, no director who served during the year under review has been granted or exercised any options during the period between 1 January 2002 and 12 April 2002.

Inclusive of those options granted to executive directors disclosed above, employees and former employees of the Group have been granted options over the following ordinary shares:

## The Remuneration Report (continued)

Scheme	Notes	Number of ordinary shares	Exercise Price	Earliest	Latest	Total by scheme
SHL	(i)	285,140	£1.00	24.11.98	23.11.02	
		271,420	£1.00	24.01.99	23.01.03	
						556,560
Exec Scheme A	(ii)	23,761	£2.180	15.02.99	14.02.06	
		12,000	£1.900	30.09.99	29.09.06	
		7,620	£2.690	26.08.00	25.08.07	
		86,429	£3.385	09.02.01	08.02.08	
		8,275	£3.625	13.08.01	12.08.08	
		25,194	£4.170	11.12.01	10.12.08	
		17,765	£4.735	15.03.02	14.03.09	
		10,618	£5.650	26.07.02	25.07.09	
		5,623	£5.335	23.08.02	22.08.09	
		4,181	£7.175	13.12.02	12.12.09	
		113,869	£10.275	01.03.03	28.02.10	
		21,426	£10.275	27.04.03	26.04.10	
		12,007	£10.275	06.06.03	05.06.10	
		9,612	£12.480	03.08.03	02.08.10	
		7,239	£12.430	19.09.03	18.09.10	
		1,500	£12.690	27.11.03	26.11.10	
						367,119
Exec Scheme B	(ii)	329,095	£1.750	15.02.99	14.02.03	
		10,000	£1.900	30.09.99	29.09.03	
		127,000	£2.185	25.03.00	24.03.04	
		320,475	£2.690	26.08.00	25.08.04	
		581,429	£3.385	09.02.01	08.02.05	
		496,725	£3.625	13.08.01	12.08.05	
		17,806	£4.170	11.12.01	10.12.05	
		37,500	£4.260	12.01.02	11.01.06	
		2,000	£4.200	10.03.02	09.03.06	
		873,235	£4.735	15.03.02	14.03.06	
		182,500	£4.705	12.05.02	11.05.06	
		19,382	£5.650	26.07.02	25.07.06	
		14,377	£5.335	23.08.02	22.08.06	
		45,819	£7.175	13.12.02	12.12.06	
		1,136,460	£10.275	01.03.03	28.02.07	
		35,000	£10.275	25.04.03	24.04.07	
195,905	£10.275	27.04.03	26.04.07			

## The Remuneration Report (continued)

		64,662	£10.275	06.06.03	05.06.07	
		95,888	£12.480	03.08.03	02.08.07	
		34,261	£12.430	19.09.03	18.09.07	
		8,000	£12.690	27.11.03	26.11.07	
						4,627,519
2000 Exec Scheme A	(vii)	2,417	£12.410	19.09.03	18.09.10	
		172,619	£12.570	05.06.04	04.06.11	
		25,674	£9.940	08.11.04	07.11.11	
						200,710
2000 Exec Scheme B	(vii)	320,248	£12.800	03.08.03	02.08.10	
		157,583	£12.410	19.09.03	18.09.10	
		4,000	£13.200	27.11.03	26.11.10	
		2,605,999	£12.570	05.06.04	04.06.11	
		368,749	£9.940	08.11.04	07.11.11	
						3,456,579
Roberts	(vi)	1,564	\$3.277	-	02.12.03	
		75,338	\$3.280	-	02.12.03	
		31,280	\$3.380	-	12.01.04	
		56,299	\$3.680	-	15.12.02	
		938	\$4.240	-	21.01.03	
		309,901	\$5.240	-	31.08.04	
		11,730	\$5.600	-	09.06.04	
		62,560	\$6.000	-	20.01.05	
		187,680	\$6.020	-	26.05.05	
		1,564	\$6.754	-	10.12.04	
		43,920	\$6.760	-	10.12.04	
		8,140	\$7.000	-	23.03.05	
						790,914
SRI	(v)	148,899	\$1.2345	-	12.03.02	
		209,316	\$1.64	-	12.03.02	
						358,215
SLI	(iv)	2,265	\$1.2955	-	10.04.04	
		6,806	\$1.2955	-	21.05.05	
		167	\$1.2969	-	22.01.06	
		9,972	\$1.2955	-	05.03.06	
		872	\$1.2955	-	07.08.06	
		2,508	\$1.7270	-	06.11.06	
		20,319	\$1.7274	-	10.12.06	

## The Remuneration Report (continued)

						42,909
Sharesave	(iii)	17,473	£1.54	01.12.01	31.05.02	
		14,739	£2.20	01.11.02	30.04.03	
		37,634	£8.56	01.06.03	30.11.03	
		26,289	£8.56	01.06.05	30.11.05	
		37,845	£8.41	01.12.04	31.05.05	
		44,043	£8.41	01.12.06	31.05.07	
						178,023
BioChem	(viii)	31,859	£2.08	-	18.06.02	
		31,859	£1.25	-	16.06.03	
		31,859	£1.24	-	26.06.04	
		9,104	£1.39	-	29.09.04	
		67,816	£1.79	-	17.01.05	
		31,859	£2.50	-	06.06.05	
		73,729	£6.00	-	01.02.06	
		157,023	£6.26	-	04.06.06	
		3,186	£5.56	-	15.06.06	
		81,014	£7.11	-	15.06.06	
		18,204	£5.01	-	12.09.06	
		3,478,858	£7.12	-	28.01.07	
		22,757	£7.75	-	28.02.07	
		2,275	£6.20	-	05.05.07	
		77,374	£7.20	-	01.09.07	
		89,651	£6.11	-	19.01.08	
		383,743	£6.94	-	20.04.08	
		203,658	£8.08	-	27.01.09	
		25,032	£7.40	-	28.02.09	
		4,097	£6.30	-	12.05.09	
		7,964	£5.70	-	10.06.09	
		10,003	£6.60	-	18.07.09	
		383,918	£9.05	-	25.01.10	
		13,653	£6.58	-	23.05.10	
		1,775	£7.48	-	25.07.10	
						5,242,270
Stock Purchase Plan	(ix)	120,819	£9.10	01.06.02	01.06.02	
		6,551	£9.74	01.08.02	01.08.02	
		301,656	£8.06	01.02.04	01.02.04	
						429,026
						<b>16,249,844</b>

## The Remuneration Report (continued)

- i) These options have been granted over shares in Shire Holdings Limited, a previous holding company of the Group. Exercise of these options results in the optionholder receiving ordinary shares in the Company.
- ii) Options granted under the Executive Scheme are subject to performance criteria and cannot be exercised in full, unless the Company's share price increases at a compound rate of at least 20.5% per annum over a minimum three-year measurement period. If the Company's share price increases at a compound rate of 14.5% per annum over a minimum three-year measurement period, 60% of the options may be exercised. If these conditions are not met after the initial three years, they are thereafter tested quarterly by reference to share price growth over the extended period. If the share price does not meet these conditions at any time, none of the options will become exercisable.
- iii) Options granted under the Sharesave Scheme are granted with an exercise price equal to 80% of the mid-market price on the day before invitations are issued to employees. Following changes in the Inland Revenue rules governing such schemes, employees may now enter into three or five-year savings contracts.
- iv) These options have been granted over shares in SLI, formerly Pharmavene Inc., a Company acquired by the Group on 23 March 1997. Exercise of these options results in the optionholder receiving ordinary shares in the Company. As a result of the acquisition of SLI, and in accordance with the terms of the original share option plan, all options granted under that plan became immediately capable of exercise.
- v) These options have been granted over shares in SRI, formerly Richwood Pharmaceutical Company, Inc., a Company acquired by the Group on 22 August 1997. Exercise of these options results in the optionholder receiving ordinary shares in the Company. As a result of the acquisition of SRI, and in accordance with the terms of the original share option plan, all options granted under that plan became immediately capable of exercise.
- vi) These options have been granted over shares in Roberts Pharmaceutical Corporation, a Company acquired by the Group on 23 December 1999. Exercise of these options results in the optionholder receiving ordinary shares in the Company. As a result of the acquisition of Roberts, and in accordance with the terms of the original Roberts share option plan, all options granted under that plan became immediately capable of performance.
- vii) Options granted under the 2000 Executive Scheme are subject to criteria and cannot be exercised in full, unless the Company's share price increases at a compound rate of at least 20.5% per annum over a minimum three-year period. If the Company's share price increases at a compound rate of at least 14.5% per annum over a minimum three-year measurement period, 60% of the options will be exercisable. If these conditions are not met after the initial three-year measurement period, they will thereafter be tested quarterly by reference to compound annual share price growth over an extended period. If the share price does not meet these conditions at any time, none of these options will become exercisable.

## The Remuneration Report (continued)

vii) continued

At the Annual General Meeting of the Company held on 5 June 2001, a resolution was passed to permit the grant of options under the 2000 Executive Scheme to be made subject to performance criteria determined prior to the date of grant. Subsequent to the passing of this resolution options have been granted based on a performance criteria being satisfied before grant namely that the Company's share price had increased by an annualised compound rate of 20.5% over a minimum three-year period.

viii) Following the acquisition of BioChem Pharma, Inc. on 11 May 2001, the BioChem Stock Option Plan was amended such that options over BioChem's common stock became options over ordinary shares of the Company. All BioChem options, which were not already exercisable, vested and became exercisable as a result of the acquisition. It is intended that no further options will be granted under the BioChem Stock Option Plan.

ix) Under the Stock Purchase Plan options are granted with an exercise price equal to 85% of the fair market value of a share on the enrolment date (the first day of the offering period) or the exercise date (the last day of the offering period), whichever is the lower. The offering period is for 27 months.

## Statement of Directors' responsibilities

### **Accounts and adoption of going concern basis**

Company law requires the directors to prepare financial statements for each financial year, which give a true and fair view of the state of affairs of the Company and Group and of the profit or loss of the Group for that period.

After making enquiries, the directors have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence in the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing the financial statements.

In preparing the financial statements, the directors are required to select suitable accounting policies and then apply them consistently; make judgements and estimates that are reasonable and prudent; and state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements.

### **Other matters**

The directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Company and Group and enable them to ensure that the financial statements comply with the Companies Act 1985. They are also responsible for safeguarding the assets of the Company and Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

## Independent Auditors' report

### **To the Shareholders of Shire Pharmaceuticals Group plc:**

We have audited the financial statements of Shire Pharmaceuticals Group plc for the year ended 31 December 2001 which comprise the Profit and Loss account, Balance sheets, Cash flow statement, Statement of Total Recognised Gains and Losses and the related notes numbered 1 to 30. These financial statements have been prepared under the accounting policies set out therein.

### **Respective responsibilities of Directors and Auditors**

The directors' responsibilities for preparing the annual report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards are set out in the Statement of directors' responsibilities. Our responsibility is to audit the financial statements in accordance with the relevant legal and regulatory requirements, United Kingdom Auditing Standards and the Listing Rules of the Financial Services Authority.

We report to you our opinion as to whether the accounts 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 company and other members of the group is not disclosed.

We review whether the Corporate governance statements reflects the company's compliance with the seven provisions of the Combined Code specified for our review by the Listing Rules, and we report if they do not. We are not required to consider whether the board's statements on internal control cover all risks and controls, or form an opinion on the effectiveness of the group's corporate governance procedures or its risk and control procedures.

We read the other information contained in the annual report, and consider whether it is consistent with the audited financial statements. This other information comprises only the Chairman's review, Chief Executive's review, Financial review, Board of Directors, Directors' Report, Corporate governance statements, Remuneration Report and Statement of directors' responsibilities. We consider the implications for our report if we become aware of any apparent misstatements or material inconsistencies with the financial statements. Our responsibilities do not extend to any other information.

### **Basis of audit opinion**

We conducted our audit in accordance with United Kingdom 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 circumstances of the company and of the group, consistently applied and adequately disclosed.



## Independent Auditors' Report (continued)

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 of the group at 31 December 2001 and of the group's profit for the year then ended and have been properly prepared in accordance with the Companies Act 1985.

### **Arthur Andersen**

#### **Chartered Accountants and Registered Auditors**

Abbots House  
Abbey Street  
Reading  
RG1 3BD

12 April 2002

## Consolidated profit and loss account

For the year to 31 December 2001

	Notes	2001 £'000	Restated 2000 £'000
<b>Turnover</b>	2		
Existing operations		509,594	343,624
Acquisitions		70,775	-
Continuing operations		580,369	343,624
Cost of sales		(83,149)	(58,596)
<b>Gross profit</b>		497,220	285,028
Other operating expenses	2	(420,798)	(205,371)
<b>Operating profit</b>			
Existing operations		56,781	79,657
Acquisitions		19,641	-
Continuing operations		76,422	79,657
<b>Profit on ordinary activities before finance charges</b>		76,422	79,657
Finance charges, net	3	4,955	(2,885)
<b>Profit on ordinary activities before taxation</b>	4	81,377	76,772
Tax on profit on ordinary activities	7	(45,668)	(6,109)
<b>Retained profit for the year</b>		35,709	70,663
<b>Earnings per share - basic</b>	9	8.7p	28.0p
<b>Earnings per share - diluted</b>	9	8.5p	27.1p

A statement of movement on reserves is given in note 24.

The accompanying notes are an integral part of this consolidated profit and loss account.

## Consolidated statement of total recognised gains and losses

For the year to 31 December 2001

	Notes	2001 £'000	Restated 2000 £'000
<b>Profit for the year</b>		35,709	70,663
Translation of the financial statements of overseas subsidiaries	24	(6,640)	15,985
<b>Total recognised gains and losses relating to the year</b>		<u>29,069</u>	<u>86,648</u>
<b>Prior year adjustment (note 10)</b>		<u>22,272</u>	
<b>Total gains and losses recognised since last annual report and accounts</b>		<u>51,341</u>	

The accompanying notes are an integral part of this consolidated statement of total recognised gains and losses.

## Balance sheets

As at 31 December 2001

	Notes	Consolidated		Company	
		2001 £'000	Restated 2000 £'000	2001 £'000	2000 £'000
<b>Fixed assets</b>					
Intangible assets– Intellectual property	11	259,850	247,278	9,135	9,842
Intangible assets– Goodwill	12	2,643,578	446,983	-	-
Tangible assets	13	77,880	33,261	2,440	2,051
Fixed asset investments	14	45,045	4,142	3,402,179	851,839
		<u>3,026,353</u>	<u>731,664</u>	<u>3,413,755</u>	<u>863,732</u>
<b>Current assets</b>					
Stocks	16	32,080	31,536	-	-
Deferred tax asset	17				
- due within 1 year		13,351	18,055	-	-
- due after 1 year		8,845	4,217	-	-
Debtors	18				
- due within 1 year		159,586	69,107	31,465	1,051
- due after 1 year		11,953	15,358	-	-
Investments	19	497,397	93,550	321,031	43,993
Cash at bank and in hand		81,434	31,194	603	883
		<u>804,646</u>	<u>263,017</u>	<u>353,099</u>	<u>45,927</u>
<b>Creditors: Amounts falling due within one year:</b>	20				
Convertible debt		(1,032)	(1,004)	(1,032)	(1,004)
Other creditors		(158,229)	(73,576)	(46,349)	(5,850)
		<u>(159,261)</u>	<u>(74,580)</u>	<u>(47,381)</u>	<u>(6,854)</u>
<b>Net current assets</b>		<u>645,385</u>	<u>188,437</u>	<u>305,718</u>	<u>39,073</u>
<b>Total assets less current liabilities</b>		<u>3,671,738</u>	<u>920,101</u>	<u>3,719,473</u>	<u>902,805</u>
<b>Creditors: amounts falling due after more than one year</b>	21				
Convertible debt		(268,178)	(1,004)	-	(1,004)
Other creditors		(9,654)	(93,182)	(276,643)	-
		<u>(277,832)</u>	<u>(94,186)</u>	<u>(276,643)</u>	<u>(1,004)</u>
<b>Net assets</b>		<u>3,393,906</u>	<u>825,915</u>	<u>3,442,830</u>	<u>901,801</u>

## Balance sheets (continued)

As at 31 December 2001

	Notes	Consolidated		Company	
		2001 £'000	Restated 2000 £'000	2001 £'000	2000 £'000
<b>Capital and reserves</b>					
Called-up share capital	23	24,091	12,854	24,091	12,854
Share premium	24	3,206,280	873,567	3,206,744	873,567
Exchangeable shares	24	194,972	-	194,972	-
Capital reserve	24	2,755	2,755	1,674	1,674
Other reserves	24	24,247	24,247	18,079	18,079
Profit and loss account	24	(58,439)	(87,508)	(2,730)	(4,373)
<b>Equity shareholders' funds</b>	25	<u>3,393,906</u>	<u>825,915</u>	<u>3,442,830</u>	<u>901,801</u>

The accounts on pages 41 to 90 were approved by the Board of Directors on 12 April 2002 and signed on its behalf by:

A C Russell

Director

The accompanying notes are an integral part of this balance sheet.

## Consolidated cash flow statement

For the year to 31 December 2001

	Notes	2001 £'000	2000 £'000
<b>Net cash inflow from operating activities</b>	28a	202,876	52,925
Returns on investments and servicing of finance:			
Interest received		13,077	4,125
Interest paid		(8,122)	(7,009)
Interest element of finance lease rentals		-	(1)
<b>Net cash inflow / (outflow) from returns on investments and servicing of finance</b>		<u>4,955</u>	<u>(2,885)</u>
<b>Taxation:</b>			
Overseas corporation tax paid		<u>(44,982)</u>	<u>(4,397)</u>
Capital expenditure and financial investments:			
Purchase of long term investment		-	(2,398)
Purchase of intangible fixed assets		(20,159)	(25,776)
Purchase of tangible fixed assets		(9,593)	(19,251)
Proceeds from sale of intangible fixed assets		3,200	1,027
Proceeds from sale of tangible fixed assets		<u>4,974</u>	<u>7,903</u>
<b>Net cash outflow for capital expenditure and financial investments</b>		<u>(21,578)</u>	<u>(38,495)</u>
Acquisitions and disposals:			
Expenses of acquisitions		(16,450)	(964)
Net cash acquired with subsidiary undertakings		<u>44,452</u>	<u>-</u>
<b>Net cash inflow / (outflow) from acquisitions</b>		<u>28,002</u>	<u>(964)</u>
<b>Cash inflow before management of liquid resources and financing</b>		<u>169,273</u>	<u>6,184</u>

## Consolidated cash flow statement (continued)

For the year to 31 December 2001

		2001 £'000	2000 £'000
	Notes		
Management of liquid resources:			
Increase in cash placed on short-term deposit	28b	(325,479)	(39,171)
Financing:			
Issue of ordinary share capital		1,050	7,904
Exercise of share options		46,961	29,085
Expenses of share issues		(23,584)	(2,089)
Capital element of finance leases	28b	-	(22)
Net increase / (decrease) in debt during the year	28b	182,808	(9,329)
<b>Net cash inflow from financing</b>		<u>207,235</u>	<u>25,549</u>
<b>Increase / (decrease) in cash in the year</b>	28b	<u>51,029</u>	<u>(7,438)</u>

The accompanying notes are an integral part of this consolidated cash flow statement.

## Notes to the accounts

### **1 Accounting policies**

A summary of the principal Group accounting policies, all of which have been applied consistently throughout the year and the preceding year, is set out below, with the exception that during the year the Group has adopted FRS19 (Deferred tax) and the prior year financial comparatives have been restated in accordance with this standard, which is explained in note 10.

#### *(a) Basis of accounting*

The accounts have been prepared under the historical cost convention, and in accordance with applicable accounting standards. The accounts have been prepared under United Kingdom Generally Accepted Accounting Principles (UK GAAP).

#### *(b) Basis of consolidation*

The Group accounts consolidate the accounts of Shire Pharmaceuticals Group plc and all its subsidiary undertakings drawn up to 31 December each year.

Under the acquisition method of accounting, the results of subsidiary undertakings acquired or disposed of in a period are included in the consolidated profit and loss account from the date of acquisition or up to the date of disposal as appropriate.

#### *(c) Intangible assets - goodwill*

Goodwill arising on acquisitions in the year ended 31 December 1997 and earlier periods was written off to reserves in accordance with the accounting standard then in force. As permitted by the current accounting standard the goodwill previously written off to reserves has not been reinstated in the balance sheet. On disposal or closure of a previously acquired business, the attributable amount of goodwill previously written off to reserves is included in determining the profit or loss on disposal.

Goodwill arising on the acquisition of subsidiary undertakings and businesses subsequent to 31 December 1997, representing any excess of the fair value of the consideration given over the fair value of the identifiable assets and liabilities acquired, is capitalised and written off on a straight line basis over its useful economic life, being 20 years. Provision is made for any impairment.

#### *(d) Intangible assets – intellectual property*

Intellectual property, including trademarks, for products with an immediate defined revenue stream and acquired for valuable consideration, is recorded at cost and amortised in equal annual instalments over the estimated useful life of the product with a maximum of 20 years. Intellectual property with no defined revenue stream is written off on acquisition. Provision is made for any impairment.



## Notes to the accounts (continued)

### 1 Accounting policies (continued)

#### *(e) Tangible fixed assets*

Tangible fixed assets are shown at cost less accumulated depreciation and any provision for impairment. Depreciation is provided on a straight line basis at rates calculated to write off the cost less estimated residual value of each asset over its estimated useful life at the following annual rates:

Freehold buildings	2-5 % per annum
Office furniture and fittings	10-25 % per annum
Equipment and other	10-25 % per annum

#### *(f) Investments*

Fixed asset investments are shown at cost less provision for impairment. Current asset investments are stated at the lower of cost and net realisable value.

In the Company balance sheet, for investments in subsidiaries acquired for consideration including the issue of shares qualifying for merger relief, advantage has not been taken of this relief and the share premium of the shares issued has been included in the cost.

#### *(g) Stocks*

Stocks are stated at the lower of cost and net realisable value. Cost incurred in bringing each product to its present location and condition is based on purchase costs calculated on a first-in, first-out basis, including transport.

Net realisable value is based on estimated normal selling price less further costs expected to be incurred to completion and disposal. Provision is made for obsolete, slow moving or defective items where appropriate.

#### *(h) Taxation*

Current tax, including UK corporation tax and foreign tax, is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantially enacted by the balance sheet date.

Deferred tax is recognised in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future or a right to pay less tax in the future have occurred at the balance sheet date. Timing differences are differences between the Group's taxable profits and its results as stated in the financial statements that arise from the inclusion of gains and losses in tax assessments in periods different from those in which they are recognised in the financial statements.

A net deferred tax asset is regarded as recoverable and therefore recognised only when, on the basis of all available evidence, it can be regarded as more likely than not that there will be suitable taxable profits from which the future reversal of the underlying timing differences can be deducted.

## Notes to the accounts (continued)

### 1 Accounting policies (continued)

#### *(h) Taxation (continued)*

Deferred tax is recognised when fixed assets are sold and it is more likely than not that the taxable gain will be rolled over, being charged to tax only if and when the replacement assets are sold.

Deferred tax is recognised in respect of the retained earnings of overseas subsidiaries and associates only to the extent that, at the balance sheet date, dividends have been accrued as receivable or a binding agreement to distribute past earnings in future has been entered into by the subsidiary.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the timing differences are expected to reverse, based on tax rates and laws that have been enacted or substantially enacted by the balance sheet date. Deferred tax is measured on a non-discounted basis.

#### *(i) Turnover*

The principal components of the Group's turnover and their respective accounting treatments are set out below.

The Group recognises turnover when:

- there is persuasive evidence of an arrangement;
- delivery of products has occurred or services have been rendered;
- the seller's price to the buyer is fixed or determinable; and
- collectibility is reasonably assured.

Product sales are recognised net upon shipment to customers. Provisions for certain rebates, product returns and discounts to customers are provided for as reductions to net turnover in the same period as the related sales are recorded.

Licensing and development fees represent revenues derived from licence agreements and from collaborative research and development arrangements.

Initial licence fees are not considered to be separable from the associated research and development activities, even where such fees are non-refundable and not creditable against research and development services to be rendered. Initial licence fees are thus deferred and recognised over the period of the licence term or the period of the associated research and development agreement. In circumstances where initial licence fees are not for a defined period, revenues are deferred and recognised over the period to the expiration of the relevant patent to which the licence relates.

## Notes to the accounts (continued)

### **1 Accounting policies (continued)**

#### *(i) Turnover (continued)*

During the term of certain research and development agreements, the Group receives non-refundable milestones as certain technical targets are achieved. Revenue is recognised on achievement of milestones.

The Group also receives non-refundable clinical milestones when certain targets are achieved during the clinical phases of development, such as the submission of clinical data to a regulatory authority. These clinical milestones are recognised when receivable. If milestone payments are creditable against future royalty payments, the milestones are deferred and released over the period in which the royalties are anticipated to be received.

Royalty income relating to licensed technology is recognised when receivable.

Revenues are stated net of VAT and similar taxes, trade discounts and intra-Group transactions.

No revenue is recognised for consideration, the value or receipt of which is dependent on future events, future performance, or refund obligations.

#### *(j) Research and development*

Research and development expenditure includes funded and unfunded expenditure and is written off in the period in which it is incurred.

#### *(k) Pensions*

The Group contributes to personal defined contribution pension plans of employees. Contributions are charged to the profit and loss account as they become payable.

#### *(l) Foreign currency*

Monetary assets and liabilities in foreign currencies are translated into sterling at the rate of exchange ruling at the balance sheet date. Transactions in foreign currencies are translated into sterling at the rate of exchange ruling at the date of the transaction.

The results of overseas operations are translated at the average rates of exchange during the period and their balance sheets at the rates ruling at the balance sheet date. Exchange differences arising from the translation of the opening net assets and on foreign currency borrowings to the extent they hedge the Group's investment in such operations, are reported in the statement of total recognised gains and losses. All other exchange differences are included in the profit and loss account.

Exchange differences arising on translation of the opening net assets and on foreign currency borrowings, to the extent that they hedge the Group's investment in such operations, are dealt with through reserves. All other exchange differences are included in the profit and loss account.

#### *(m) Leases*

The cost of operating leases is charged to the profit and loss account on a straight line basis over the lease term, even if rental payments are not made on such a basis.

## Notes to the accounts (continued)

### **1 Accounting policies (continued)**

#### *(m) Leases (continued)*

Assets acquired under finance leases are included in the balance sheet as tangible fixed assets and are depreciated over the shorter of the period of lease or their useful lives. The capital elements of future lease payments are recorded as liabilities, while the interest elements are charged to the profit and loss account over the period of the leases to give a constant charge on the balance of the capital repayments outstanding.

#### *(n) Finance costs*

Finance costs of debt are charged to the profit and loss account over the term of the debt at a constant rate on the carrying amount.

#### *(o) Debt*

Debt is initially stated at the amount of the net proceeds after deduction of issue costs. The carrying amount is increased by the finance cost in respect of the accounting period and reduced by payments made in the period. Convertible debt is reported as a liability unless conversion actually occurs. No gain or loss is recognised on conversion.

#### *(p) Government grants*

Government grants in respect of funded research and development expenditure are credited to the profit and loss account as the related expenditure is incurred.

#### *(q) Derivative financial instruments*

The Group uses derivative financial instruments to reduce exposure to foreign exchange risk and interest rate movements. The Group does not hold or issue derivative financial instruments for speculative purposes.

For a forward foreign exchange contract to be treated as a hedge the instrument must be related to actual foreign currency assets or liabilities or to a probable commitment. It must involve the same currency or similar currencies as the hedged item and must also reduce the risk of foreign currency exchange movements on the Group's operations. Gains and losses arising on these contracts are deferred and recognised in the profit and loss account, or as adjustments to the carrying amount of fixed assets, only when the hedged transaction has itself been reflected in the Group's accounts.

For an interest rate swap to be treated as a hedge the instrument must be related to actual assets or liabilities or a probable commitment and must change the nature of the interest rate by converting a fixed rate to a variable rate or vice versa. Interest differentials under these swaps are recognised by adjusting net interest payable over the periods of the contracts.

If an instrument ceases to be accounted for as a hedge, for example because the underlying hedged position is eliminated, the instrument is marked to market and any resulting profit or loss recognised at that time.

## Notes to the accounts (continued)

### 1 Accounting policies (continued)

#### (r) Employee share schemes

In accordance with UITF Abstract 17 (Employee share schemes), the cost of awards to employees that take the form of shares or rights to shares is recognised as a charge in the profit and loss account. The amount recognised, which is the difference between the market value at date of grant and the underlying share and any exercise price, is charged to the profit and loss account over the period the shares are vested, with a corresponding credit to reserves.

#### (s) Related party transactions

In accordance with the exemptions in FRS 8 (Related party disclosures), transactions between Group companies have not been disclosed since Group accounts are prepared and include the results of all subsidiary undertakings.

### 2 Turnover and segment information

#### (a) Turnover by business activity

	2001 £'000	2000 £'000
Product sales	508,626	330,797
Licensing and development fees	3,810	9,273
Royalties	66,132	2,716
Other revenues	1,801	838
	<u>580,369</u>	<u>343,624</u>

#### (b) Profit/(loss) on ordinary activities before taxation by business activity

	Product sales £'000	Licensing & development £'000	Royalties £'000	Other revenues £'000	Total £'000
Year to 31 December 2001					
Turnover	508,626	3,810	66,132	1,801	580,369
Cost of product sales	(83,149)	-	-	-	(83,149)
Distribution costs	(147,400)	-	-	-	(147,400)
Funded research and development costs	-	(4,358)	-	-	(4,358)
	<u>278,077</u>	<u>(548)</u>	<u>66,132</u>	<u>1,801</u>	<u>345,462</u>
Unfunded research and development costs					(99,468)
Expenses not allocated					(169,572)
Operating profit					<u>76,422</u>
Finance charges, net					4,955
Profit on ordinary activities before taxation					<u>81,377</u>

## Notes to the accounts (continued)

### 2 Turnover and segment information (continued)

#### (b) Profit on ordinary activities before taxation by business activity (continued)

General overheads have not been allocated by business activity as management do not run the business in this way.

The Group profit and loss statement for the year includes £19,641,000 in respect of operating profit attributable to subsidiary undertakings acquired in the year.

Year to 31 December 2000	Product sales £'000	Licensing & development £'000	Royalties £'000	Other revenues £'000	Total £'000
Turnover	330,797	9,273	2,716	838	343,624
Cost of product sales	(58,596)	-	-	-	(58,596)
Distribution costs	(79,647)	-	-	-	(79,647)
Funded research and development costs	-	(6,956)	-	-	(6,956)
	<u>192,554</u>	<u>2,317</u>	<u>2,716</u>	<u>838</u>	<u>198,425</u>
Unfunded research and development costs					(47,471)
Expenses not allocated					(71,297)
Operating profit					79,657
Finance charges, net					(2,885)
Profit on ordinary activities before taxation					<u>76,772</u>

#### (c) Geographical analysis by country of origin

	2001 £'000	2000 £'000
Turnover:		
US	428,791	276,500
International	151,578	67,124
Global R&D	-	-
	<u>580,369</u>	<u>343,624</u>
Profit/(loss) on ordinary activities before taxation:		
US	291,978	113,170
International	(106,775)	33,958
Global R&D	(103,826)	(70,356)
	<u>81,377</u>	<u>76,772</u>

Analysis by destination is not materially different from analysis by origin.

## Notes to the accounts (continued)

### 2 Turnover and segment information (continued)

	2001 £'000	Restated 2000 £'000
Net assets/(liabilities):		
US	230,092	105,259
International	3,304,220	746,497
Global R&D	(140,406)	(25,841)
	<u>3,393,906</u>	<u>825,915</u>

#### d) Acquisition of BioChem Pharma Inc.

The analysis above include the following amounts in respect of operations acquired during the year:

	2001 £'000
International:	
Product sales	8,997
Royalties	60,501
Profit on ordinary activities before taxation	24,127
Net assets	<u>241,705</u>

### 3 Finance charges, net

	2001 £'000	2000 £'000
Investment income		
Income from current asset investments	<u>13,077</u>	<u>4,125</u>
Interest payable and similar charges		
Bank loans and overdrafts	8,122	7,009
Finance leases and hire purchase contracts	-	1
	<u>8,122</u>	<u>7,010</u>
Finance charges, net		
Investment income	13,077	4,125
Interest payable and similar charges	<u>(8,122)</u>	<u>(7,010)</u>
	<u>4,955</u>	<u>(2,885)</u>

## Notes to the accounts (continued)

### 4 Profit on ordinary activities before taxation

Profit on ordinary activities before taxation is stated after charging/(crediting):

	2001 £'000	2000 £'000
Government grant	(1,824)	-
Research and development	103,826	54,427
Auditors' remuneration		
- audit fees	535	350
- non-audit fees	1,293	1,398
Operating lease rentals		
- plant and machinery	2,264	1,756
- other	1,891	1,049
Impairment of intangible fixed assets	3,092	-
Depreciation of tangible fixed assets		
- owned	7,092	2,499
- held under finance leases and hire purchase contracts	-	24
Amortisation of goodwill	96,710	23,512
Amortisation of intangible fixed assets	14,544	10,089
Loss on sales of fixed assets	7,647	-
Foreign exchange (gain)/loss	(1,125)	488

In addition to the amounts shown above, the following has been charged in 2001:

Non-audit fees of £848,000 incurred in relation to the acquisition of BioChem have been capitalised within the cost of the investment. A further £320,000 of non-audit fees incurred in relation to the issue of convertible debt are being amortised over the term of the debt (2000: £nil).

### 5 Staff costs

Particulars of employee costs (including executive directors' remuneration) are shown below:

	2001 £'000	2000 £'000
Wages and salaries	78,888	32,682
Social security costs	7,608	4,457
Pension contributions	3,123	1,745
	<u>89,619</u>	<u>38,884</u>

The Group operates an Inland Revenue approved employee share option scheme and has taken advantage of the exemption given in UITF Abstract 17 (Employee share schemes) from recognising a charge in the profit and loss account for the discount on the options.



## Notes to the accounts (continued)

### 5 Staff costs (continued)

The average monthly number of people employed by the Group during the year was as follows:

	2001 Number	2000 Number
Manufacturing	236	154
Distribution	704	552
General and administrative	220	119
Research and development	315	143
	<u>1,475</u>	<u>968</u>

### 6 Directors' remuneration, interests and transactions

#### *Aggregate remuneration*

The total amounts for Directors' remuneration and other benefits were as follows:

	2001 £'000	2000 £'000
Aggregate emoluments	2,019	1,332
Compensation for loss of office	2,754	-
Gains on exercise of share options	22,005	11,053
Company contributions to money purchase pension schemes	103	76
	<u>26,881</u>	<u>12,461</u>

No fees were payable to third parties in respect of Directors' services for either year.

The number of Directors who were members of a company pension scheme was as follows:

	2001 Number	2000 Number
Money purchase schemes	<u>3</u>	<u>3</u>

Contributions paid by the Group in respect of these Directors can be found in the Remuneration Report on page 27.

The above amounts for remuneration include the following in respect of the highest paid Director:

	2001 £'000	2000 £'000
Aggregate emoluments	258	20
Compensation for loss of office	2,754	-
Gains on exercise of share options	21,437	10,320
	<u>24,449</u>	<u>10,340</u>

Further disclosures relating to Directors' remuneration and interests in transactions can be found in the Remuneration Report.

## Notes to the accounts (continued)

### 7 Tax on profit on ordinary activities

The tax charge comprises:

	2001 £'000	Restated 2000 £'000
<b>Current tax</b>		
UK corporation tax	76	-
Overseas corporation tax	46,879	2,242
<b>Adjustment to prior year tax charge</b>		
UK corporation tax	-	-
Overseas corporation tax	(2,049)	1,328
	<u>44,906</u>	<u>3,570</u>
<b>Deferred Tax</b>		
Origination and reversal of timing differences	762	2,539
Total Deferred Tax	<u>762</u>	<u>2,539</u>
Total tax on profit on ordinary activities	<u>45,668</u>	<u>6,109</u>

The differences between the total current tax shown above and the amount calculated by applying the standard rate of UK corporation tax to the profit before tax is as follows:

	2001 £'000	2000 £'000
<b>Group profit on ordinary activities before tax</b>	<u>81,377</u>	<u>76,772</u>
Tax on profit on ordinary activities at standard UK corporation tax rate of 30% (2000: 30%)	24,413	23,032
Effects of:		
Expenses not deductible for tax purposes	782	1,715
Non deductible goodwill	29,090	7,051
Additional tax benefits / non taxable income	(4,090)	(20,949)
Utilisation of tax losses	(256)	(171)
Capital taxes and withholding taxes	4,360	-
Different tax rates on overseas earnings	(6,582)	(5,897)
Deferred Tax liability	(762)	(2,539)
Adjustments to tax charge in respect of previous periods	(2,049)	1,328
<b>Group current tax charge for period</b>	<u>44,906</u>	<u>3,570</u>

## Notes to the accounts (continued)

### 8 Profit/(loss) attributable to Shire Pharmaceuticals Group plc

The profit for the financial year dealt with in the accounts of the Company was £1,643,000 (2000 – loss £6,185,000). As provided by section 230 of the Companies Act 1985, no profit and loss account is presented in respect of the Company.

### 9 Earnings per share

Earnings per share (EPS) has been calculated by dividing the profit on ordinary activities after taxation for each period by the weighted average number of shares in issue during those periods.

The weighted average number of shares used in calculating fully diluted earnings per share has been adjusted for the effects of all dilutive potential ordinary shares. The zero coupon convertible loan note has no impact on the numerator for diluted EPS.

	Basic and diluted	
	2001	Restated 2000
	£'000	£'000
Profit for the financial year	35,709	70,663

The weighted average number of shares used in each year are as follows:

	Number 2001	Number 2000
Weighted average number of shares in issue for basic EPS	412,183,058	252,497,255
Conversion of convertible debt	289,101	-
Exercise of share options	6,270,923	8,411,015
Exercise of warrants	919,029	-
Total for fully diluted EPS	419,662,111	260,908,270

### 10 Prior year adjustment

The Group policy for accounting for deferred tax has changed to comply with FRS 19 (Deferred tax). Previously deferred tax was only provided to the extent that timing differences were expected to reverse in the future without being replaced. Deferred tax is now provided in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events that result in an obligation to pay more tax in the future or a right to pay less tax in the future have occurred at the balance sheet date. The statement of accounting policies describes the full deferred tax policy. The comparative numbers in the primary statements have been restated to reflect this policy.

## Notes to the accounts (continued)

### 10 Prior year adjustment (continued)

The effects of the change in policy are summarised below:

	2001 £'000	Restated 2000 £'000
<b>Profit and loss account</b>		
Increase in deferred tax charge	<u>762</u>	<u>2,539</u>
<b>Balance sheet</b>		
(Decrease)/ increase in deferred tax asset	<u>(76)</u>	<u>22,272</u>

### 11 Intangible assets - intellectual property

	Group £'000	Company £'000
<b>Cost</b>		
As at 31 December 2000	291,410	10,075
Additions	20,159	-
Acquisitions	7,149	-
Disposals	(6,043)	(7)
Foreign exchange	9,081	-
<b>As at 31 December 2001</b>	<u>321,756</u>	<u>10,068</u>
<b>Amortisation</b>		
As at 31 December 2000	(44,132)	(233)
Charge for the period	(14,544)	(700)
Impairment	(3,092)	-
Disposals	763	-
Foreign exchange	(901)	-
<b>As at 31 December 2001</b>	<u>(61,906)</u>	<u>(933)</u>
<b>Net book value</b>		
As at 31 December 2000	<u>247,278</u>	<u>9,842</u>
<b>As at 31 December 2001</b>	<u>259,850</u>	<u>9,135</u>

During the first quarter of 2001, and included within additions for the year, the Group purchased two new products; Indurgan and Monocid, to be marketed and sold by the Group's Spanish and Italian operations respectively. The purchase price was approximately £15.2 million.

The impairment was in respect of write-downs made to two non-strategic products that are no longer marketed by the Group.

## Notes to the accounts (continued)

### 11 Intangible assets - intellectual property (continued)

In October 2001, the Company acquired the exclusive pan-European rights to market Adept for £5.0 million; a new therapy containing Icodextrin, which reduces internal scarring following abdominal and pelvic surgery. Adept was developed by ML Laboratories plc, which retains all rights to Adept for the rest of the world. Adept has approval from the regulatory bodies for the EU and will be launched in early 2002 across continental Europe.

### 12 Intangible assets – goodwill

	Group £'000	Company £'000
<b>Cost</b>		
As at 31 December 2000	471,173	-
Acquisition of subsidiary undertaking (Note 15)	2,293,305	-
	<hr/>	<hr/>
As at 31 December 2001	2,764,478	-
	<hr/>	<hr/>
<b>Amortisation</b>		
As at 31 December 2000	(24,190)	-
Charge for the year	(96,710)	-
	<hr/>	<hr/>
As at 31 December 2001	(120,900)	-
	<hr/>	<hr/>
<b>Net book value</b>		
As at 31 December 2000	446,983	-
	<hr/>	<hr/>
As at 31 December 2001	2,643,578	-
	<hr/>	<hr/>

## Notes to the accounts (continued)

### 13 Tangible fixed assets

(a) Group

	Freehold land and buildings £'000	Office furniture and fittings £'000	Equipment and other £'000	Total £'000
<b>Cost</b>				
As at 31 December 2000	22,699	9,244	9,963	41,906
Acquisitions	45,130	744	9,210	55,084
Additions	789	2,023	7,052	9,864
Disposals	(7,831)	(491)	(4,370)	(12,692)
Transfers	945	(4,074)	3,129	-
Foreign exchange	(2,847)	(61)	(360)	(3,268)
As at 31 December 2001	<u>58,885</u>	<u>7,385</u>	<u>24,624</u>	<u>90,894</u>
<b>Depreciation</b>				
As at 31 December 2000	(1,061)	(4,674)	(2,910)	(8,645)
Charge	(2,107)	(1,078)	(3,907)	(7,092)
Disposals	660	1,071	149	1,880
Transfers	-	1,328	(1,328)	-
Foreign exchange	419	70	354	843
As at 31 December 2001	<u>(2,089)</u>	<u>(3,283)</u>	<u>(7,642)</u>	<u>(13,014)</u>
<b>Net book value</b>				
As at 31 December 2000	<u>21,638</u>	<u>4,570</u>	<u>7,053</u>	<u>33,261</u>
As at 31 December 2001	<u>56,796</u>	<u>4,102</u>	<u>16,982</u>	<u>77,880</u>

There were no assets held under finance leases or hire purchase agreements during 2001. Assets held under finance leases and hire purchase agreements during 2000 were fully depreciated at 31 December 2000.

Freehold land, amounting to £1,063,000 (2000 - £5,264,000) for the Group has not been depreciated.

Notes to the accounts (continued)

**13 Tangible fixed assets (continued)**

*(b) Company*

	Office furniture and fittings £'000	Equipment and other £'000	Total £'000
<b>Cost</b>			
As at 31 December 2000	828	2,885	3,713
Additions	631	705	1,336
	<u>1,459</u>	<u>3,590</u>	<u>5,049</u>
As at 31 December 2001	<u>1,459</u>	<u>3,590</u>	<u>5,049</u>
<b>Depreciatbn</b>			
As at 31 December 2000	(378)	(1,284)	(1,662)
Charge	(267)	(680)	(947)
	<u>(645)</u>	<u>(1,964)</u>	<u>(2,609)</u>
As at 31 December 2001	<u>(645)</u>	<u>(1,964)</u>	<u>(2,609)</u>
<b>Net book value</b>			
As at 31 December 2000	450	1,601	2,051
	<u>450</u>	<u>1,601</u>	<u>2,051</u>
As at 31 December 2001	<u>814</u>	<u>1,626</u>	<u>2,440</u>

There were no assets held under finance leases or hire purchase agreements during 2001 or 2000.

## Notes to the accounts (continued)

### 14 Fixed asset investments

#### Group

##### (a) Investments in private companies

The Group holds investments in private companies at cost, less provision for other than temporary impairments in value. The Group acquired investments in private companies and partnerships totalling £39.95 million upon the acquisition of BioChem in May 2001. This includes investments made in the year to Genechem Technologies Venture Fund and Genechem Therapeutic of approximately £2.0 million (CAN\$ 7.5 million), EGS Private Healthcare of approximately £1.5 million (CAN\$ 3.3 million) and Qualia Computing of approximately £4.1 million (CAN\$ 9.2 million).

##### (b) Investments in public companies

In December 2000 the Group signed a research, development and licensing agreement with CeNeS Pharmaceuticals plc for the development of CeNeS' dopamine D1 agonist programme for the treatment of Parkinson's disease and undertook to make milestone payments and pay CeNeS royalties on products developed under the agreement. The Company made an equity investment in CeNeS of £500,000 and undertook to fund all development work in relation to the programme referred to above. In the year ended 31 December 2001 the Company wrote down the investment as the market value of the investment at 31 December 2001 had fallen to £52,000. The Group has no other listed investments.

#### Group

	Other Investments £'000
As at 31 December 2000	4,142
Acquisitions	41,356
Written off	(500)
Foreign exchange movement	47
As at 31 December 2001	<u>45,045</u>

#### Company

	Shares in non-subsidiary undertakings £'000	Shares in subsidiary undertakings £'000	Convertible loan stock £'000	Amount due from subsidiary undertakings £'000	Total £'000
As at 31 December 2000	2,398	648,588	83,844	117,009	851,839
Acquisitions					
- BioChem	-	2,530,942	-	-	2,530,942
- Other subsidiary undertakings	-	29,428	-	-	29,428
Written off	(500)	-	-	-	(500)
Net repayments	-	-	-	(9,530)	(9,530)
Interest on intra-Group loan note	-	(8,375)	8,375	-	-
As at 31 December 2001	<u>1,898</u>	<u>3,200,583</u>	<u>92,219</u>	<u>107,479</u>	<u>3,402,179</u>



## Notes to the accounts (continued)

### 14 Fixed asset investments (continued)

Shire Holdings Europe Limited, a Group company, issued Unsecured Convertible Redeemable Loan Stock (1997-2002) in favour of the Company in consideration for the whole of the issued share capital of Shire Laboratories, Inc. at a price of £60 million. The loan stock has a face value of £96.6 million and a book value of £92.2 million as at 31 December 2001.

#### *Principal subsidiaries*

The Company owned directly or indirectly the whole of the issued ordinary share capital of the following companies at 31 December 2001 as shown in the following table:

Principal Subsidiary/Undertakings	Country of incorporation/ operation	Principal activity
Shire Pharmaceuticals Limited*	UK	Marketing of pharmaceuticals.
Shire Pharmaceutical Development Limited*	UK	Development of pharmaceuticals, including on behalf of other Group companies.
Shire International Licensing BV	Netherlands	Licensing and development of pharmaceuticals.
Shire Laboratories Inc	US	Development and licensing of pharmaceuticals, including on behalf of other Group companies.
Shire Biologics Inc	US	Research and development of pharmaceuticals, including on behalf of other Group companies.
Shire France SA	France	Marketing of pharmaceuticals.
Shire Deutschland GmbH & Co K G	Germany	Marketing of pharmaceuticals.
Shire Italia SpA	Italy	Marketing of pharmaceuticals.
Shire BioChem Inc	Canada	Research and development of pharmaceuticals, including on behalf of other Group companies.
Shire US Inc	US	Marketing of pharmaceuticals.
Shire Pharmaceuticals Iberica SL	Spain	Marketing and distribution of pharmaceuticals.
Shire Pharmaceuticals Development US Inc	US	Development of pharmaceuticals, including on behalf of other Group companies.
Shire Finance Limited*	Cayman Islands	Issuer of convertible notes

All subsidiary undertakings have been included in these consolidated financial statements.

\*Held directly by Shire Pharmaceuticals Group plc.

## Notes to the accounts (continued)

### 15 Acquisition of subsidiary undertaking

On 11 May 2001, the Company acquired 100% of the issued share capital of BioChem Pharma, Inc. for consideration comprising the issue of 179.4 million ordinary shares of 5p each and 17.3 million exchangeable shares. The fair value of the consideration was £2,514.5 million. The transaction was accounted for using acquisition accounting. The following table sets out the book values of the identifiable assets and liabilities acquired and their fair value to the Group:

	Book value	Revaluation	Accounting policy alignment	Other significant items	Fair value to Group
	£'000	£'000	£'000	£'000	£'000
<b>Fixed assets</b>					
Intangible assets	42,127	(14,426)	(20,552)	-	7,149
Tangible assets	58,206	-	(3,122)	-	55,084
Fixed asset investments	78,449	(37,093)	-	-	41,356
<b>Current assets</b>					
Stocks	3,380	-	-	-	3,380
Debtors	38,991	-	-	-	38,991
Investments	81,995	-	-	-	81,995
Cash at bank and in hand	44,452	-	-	-	44,452
<b>Total assets</b>	<b>347,600</b>	<b>(51,519)</b>	<b>(23,674)</b>	<b>-</b>	<b>272,407</b>
<b>Creditors</b>					
Bank loans	4,164	-	-	-	4,164
Creditors	18,888	-	-	11,718	30,606
<b>Total liabilities</b>	<b>23,052</b>	<b>-</b>	<b>-</b>	<b>11,718</b>	<b>34,770</b>
<b>Net assets</b>	<b>324,548</b>	<b>(51,519)</b>	<b>(23,674)</b>	<b>(11,718)</b>	<b>237,637</b>
Goodwill					2,293,305
					<b>2,530,942</b>
<b>Satisfied by</b>					
Shares issued					2,514,492
Expenses of acquisition					16,450
					<b>2,530,942</b>

## Notes to the accounts (continued)

### 15 Acquisition of subsidiary undertaking (continued)

Details of the fair value adjustments are as follows:

#### Intangible assets

A revaluation adjustment of £14,426,000 was made to intangible assets to adjust asset values, primarily trademark and patent costs but also an element of product rights, to their fair value.

An accounting policy alignment adjustment was also recorded against the intangible assets book value. Included in the book value of BioChem's intangible assets was capitalised research and development costs of £20,552,000.

#### Tangible assets

An accounting policy alignment adjustment of £3,122,000 was made to tangible assets because the book value included capitalised start up costs. UITF Abstract 24, (Accounting for start-up costs), states that costs which do not meet the specific conditions for recognition as assets under a relevant accounting standard such as FRS 15 (Tangible fixed assets), should not be recognised on the balance sheet but expensed as incurred.

#### Fixed asset investments

A revaluation adjustment totalling £37,093,000 was made to adjust fixed asset investment values, comprising long term unquoted investments and a debenture received by BioChem on divestiture of its diagnostics subsidiary, to their estimated fair value. These adjustments are consistent with the Group's policy to provide for other than temporary impairments in value by reference to the fair value of the investment using established financial methodologies.

#### Creditors

BioChem made payments totalling £11,718,000 in respect of transaction expenses, including professional and bankers fees related to the acquisition. These costs were paid subsequent to the acquisition date and hence are included in creditors with a corresponding adjustment to pre acquisition reserves.

Net cash in respect of the acquisition comprised:

	£'000
Cash at bank and in hand acquired	<u>44,452</u>

An amount of £5,400,000 has been charged to the Group profit and loss account in respect of costs incurred in reorganising, restructuring and integrating the acquisition in the period from 11 May to 31 December 2001.

## Notes to the accounts (continued)

### 15 Acquisition of subsidiary undertaking (continued)

BioChem earned, under UK GAAP, a profit after taxation of £33.6 million in the year ended 31 December 2001 (year ended 31 December 2000: £126.8 million after a gain on sale of investments of £63.3 million), of which £16.0 million arose in the period from 1 January 2001 to 10 May 2001.

The summarised profit and loss account and statement of total recognised gains and losses for the period from 1 January 2001 to 10 May 2001, shown on the basis of the accounting policies of BioChem prior to the acquisition, are as follows:

#### Profit and loss account

	£'000
<b>Turnover</b>	35,968
Cost of sales	(1,872)
<b>Gross profit</b>	34,096
Other operating expenses (net)	(20,154)
<b>Operating profit</b>	13,942
Finance charges (net)	4,271
<b>Profit on ordinary activities before taxation</b>	18,213
Tax on profit on ordinary activities	(2,164)
<b>Profit on ordinary activities after taxation</b>	16,049

#### Statement of total recognised gains and losses

	£'000
<b>Profit for the financial period</b>	16,049
Gain on foreign currency translation	103
<b>Total recognised gains and losses relating to the period</b>	16,152

## Notes to the accounts (continued)

### 16 Stocks

	Group		Company	
	2001 £'000	2000 £'000	2001 £'000	2000 £'000
Raw materials and consumables	18,421	16,095	-	-
Finished goods and goods for resale	13,659	15,441	-	-
	<u>32,080</u>	<u>31,536</u>	<u>-</u>	<u>-</u>

There is no material difference between the balance sheet value of stocks and their replacement cost.

### 17 Deferred tax asset

	Deferred tax £'000
<b>Group</b>	
Restated at 1 January 2000	22,851
Charged to profit and loss account	(2,539)
Exchange adjustment	1,960
Restated at 31 December 2000	<u>22,272</u>
Charged to profit and loss account	(762)
Acquisition of subsidiary undertaking	184
Exchange adjustment	502
At 31 December 2001	<u>22,196</u>

Deferred tax is provided and unprovided as follows:

	Unprovided		Provided	
	2001 £'000	2000 £'000	Restated Unprovided 2000 £'000	Restated Provided 2000 £'000
<b>Group</b>				
Accelerated capital allowances	-	(18,284)	-	(13,501)
Other timing differences	-	17,146	-	16,772
Tax losses available	<u>85,873</u>	<u>23,334</u>	<u>24,778</u>	<u>19,001</u>
<b>Deferred tax asset</b>	<u>85,873</u>	<u>22,196</u>	<u>24,778</u>	<u>22,272</u>

Amounts unprovided represent tax losses which the Group does not expect to utilise in the foreseeable future.

## Notes to the accounts (continued)

### 18 Debtors

	Group		Company	
	2001 £'000	2000 £'000	2001 £'000	2000 £'000
Amounts falling due within one year:				
Trade debtors	130,976	61,724	43	-
VAT	3,715	718	905	205
Other debtors	9,262	3,112	647	454
Prepayments and accrued income	15,633	3,553	621	392
Amounts due from other group undertakings	-	-	29,249	-
	<u>159,586</u>	<u>69,107</u>	<u>31,465</u>	<u>1,051</u>
Amounts falling due after more than one year:				
Notes receivable	-	224	-	-
SERP	9,872	10,788	-	-
Other debtors	2,081	4,346	-	-
	<u>11,953</u>	<u>15,358</u>	<u>-</u>	<u>-</u>

For further details of the Supplemental Executive Retirement Plan (SERP) asset, see note 27. The amount shown above is the gross asset represented by non-current marketable securities. A related liability of approximately £7.8 million is included within note 21.

### 19 Current asset investments

	Group		Company	
	2001 £'000	2000 £'000	2001 £'000	2000 £'000
Institutional cash fund	328,252	44,012	321,031	43,993
Commercial paper	169,145	18,744	-	-
Marketable securities	-	30,794	-	-
	<u>497,397</u>	<u>93,550</u>	<u>321,031</u>	<u>43,993</u>

There is no material difference between book value and fair value as at 31 December 2001 and 2000.

## Notes to the accounts (continued)

### 20 Creditors: amounts falling due within one year

	Group		Company	
	2001 £'000	2000 £'000	2001 £'000	2000 £'000
<b>Convertible debt</b>				
Zero coupon convertible unsecured loan note (note 21 iii)	1,032	1,004	1,032	1,004
<b>Other creditors</b>				
Bank term loans (note 21 iv and v)	1,976	-	-	-
Trade creditors	39,254	26,614	1,827	1,135
Payable in respect of termination of a licence agreement	507	500	-	-
Overseas corporation tax payable	17,043	2,854	-	-
VAT	789	686	-	-
Social security and PAYE	4,973	548	188	134
Other creditors	2,376	2,489	527	1,125
Accruals and deferred income	91,311	39,885	4,610	3,456
Amounts due to other group undertakings	-	-	39,197	-
	<u>158,229</u>	<u>73,576</u>	<u>46,349</u>	<u>5,850</u>
	<u>159,261</u>	<u>74,580</u>	<u>47,381</u>	<u>6,854</u>

## Notes to the accounts (continued)

### 21 Creditors: amounts falling due after more than one year

	Notes	Group		Company	
		2001 £'000	2000 £'000	2001 £'000	2000 £'000
<b>Convertible debt</b>					
Zero coupon convertible unsecured loan note	(iii)	-	1,004	-	1,004
2% guaranteed convertible loan stock 2011	(i)	268,178	-	-	-
		<u>268,178</u>	<u>1,004</u>	<u>-</u>	<u>1,004</u>
<b>Other creditors</b>					
Bank term loan	(iii, iv)	1,705	83,679	-	-
Payable in respect of termination of a licence agreement		-	250	-	-
Other creditors		7,949	9,253	-	-
Amounts due to other group undertakings		-	-	276,643	-
		<u>9,654</u>	<u>93,182</u>	<u>276,643</u>	<u>-</u>
		<u>277,832</u>	<u>94,186</u>	<u>276,643</u>	<u>1,004</u>

Included within other creditors is £7,797,000 relating to the SERP (31 December 2000: £9,110,000). See note 27 for details.

Subject to the conditions below, borrowings are repayable as follows:

	Notes	Group		Company	
		2001 £'000	2000 £'000	2001 £'000	2000 £'000
<b>Convertible loan note:</b>					
Between one and two years	(iii)	-	1,004	-	1,004
Between two and five years	(i)	268,178	-	-	-
After five years		-	-	-	-
		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Other creditors</b>					
Bank term loan:					
Between one and two years		1,705	-	-	-
Between two and five years		-	83,679	-	-
		<u>1,705</u>	<u>83,679</u>	<u>-</u>	<u>-</u>
		<u>269,883</u>	<u>84,683</u>	<u>-</u>	<u>1,004</u>



## Notes to the accounts (continued)

**21 Creditors:** amounts falling due after more than one year (continued)

**(i) £274.9 million (\$400 million) convertible notes due 2011**

On 15 August 2001, Shire Finance Limited, a wholly owned subsidiary of the Company, placed an offering of £240.5 million (\$350 million) principal amount of Guaranteed Convertibles Notes due 2011 with international institutional investors at an issue price of 100%. In connection with the issue, the initial purchasers exercised in full the option to subscribe or procure subscribers for an additional £34.4 million (\$50 million) principal amount of notes. The total principal amount of the issue was therefore £274.9 million (\$400 million).

The notes are guaranteed by the Company and are convertible into redeemable preference shares of the issuer which upon issuance will be immediately exchanged for either (i) ordinary shares or (ii) American Depository Shares (ADSs) of the Company, or, at the Issuers option, cash.

The notes bear interest of 2% per annum, paid semi-annually. The effective initial exchange price is £14,107 (\$20.154) per ordinary share and £41.544 (\$60.4625) per ADS. This exchange price represents a premium of 25% over the closing price of Shire ADSs on 14 August 2001.

Investors have the right, subject to certain conditions, to require the Issuer to redeem the notes at par on 21 August 2004, 2006 or 2008. Subject to certain conditions, the notes will be callable by the Issuer after 21 August 2004.

**(ii) £83.7m (\$125m) five year term loan**

The Company entered into a £83.7 million (\$125 million) five year term loan and a £83.7 million (US\$125 million) committed facility with Credit Suisse First Boston (CSFB), previously known as DLJ Capital Funding Inc., on 19 November 1999. This loan replaced an existing \$125 million loan facility in the name of Roberts Pharmaceutical Corporation that had been taken out to finance the acquisition of PENTASA in 1998. The term loan was repaid in full during the year. The committed facility terminated on the issue of the £274.9 million (US\$400 million) convertible notes due 2011. All obligations under the facility, which was jointly and severally guaranteed by the Company and its subsidiaries and secured by all material property owned by the Company and its subsidiaries and the capital stock of the subsidiaries, have been released.

**(iii) £7.9 million (\$11.8 million) Unsecured Convertible Zero Coupon Loan Note**

The Company financed the purchase of intellectual property relating to the manufacture of ADDERALL from Arenol Corporation by a total of £7.9 million (\$11.8 million) in loan notes. On 5 March 1999 the Company issued a £3.9 million (\$5.8 million) principal amount Unsecured Convertible Zero Coupon Loan note due 30 July 2001 (the First Loan Note) and a £4.0 million (\$6.0 million) principal amount Unsecured Convertible Zero Coupon Loan Note due 30 July 2004 (the Second Loan Note). Both loan notes are in the name of the parent company, Shire Pharmaceuticals Group plc. The agreement provides for the cancellation of certain specified amounts of the aggregate principal amount of the First Loan Note and of such amounts of the Second Loan Note on certain dates to the extent of certain indemnified losses or, to the extent that such amounts of the First Loan Note or the Second Loan Note (together the Loan Notes) are not so cancelled, for their conversion into ordinary shares.

## Notes to the accounts (continued)

### **21 Creditors: amounts falling due after more than one year (continued)**

The number of ordinary shares is calculated by dividing the amount not cancelled by the lower of £3.565 and the midweek closing price of the ordinary shares on the London Stock Exchange on the relevant date. Translation from pounds sterling to US dollars is made using the exchange rate on the relevant date.

#### **(iii) £7.9 million (\$11.8 million) Unsecured Convertible Zero Coupon Loan Note (continued)**

The Company issued 533,279, 560,076, 541,478 and 295,061 ordinary shares on 13 March 2000, 3 August 2000, 6 November 2000, and 6 August 2001, respectively to Arenol Corporation (or its nominee broker) in consideration of the conversion of part of each of the Loan Notes in the Company.

#### **(iv) Canadian federal and provincial government loan**

The Company has a Canadian federal and provincial government loan outstanding of £2.1 million (CAN\$5.0 million). This facility is non-interest bearing and is repayable in annual installments of £0.5 million (CAN\$1.2 million) commencing in May 2002.

#### **(v) Bank term loans**

The Company has a bank loan at 31 December 2001 bearing interest at the lender's prime rate. The loan is secured by a charge on land and buildings, and is repayable in annual installments of £0.3 million (CAN\$0.6 million) with a final payment of £1.6 million (CAN\$3.6 million) in May 2002. This loan is renegotiable for an additional five year period.

### **22 Derivatives and other financial instruments**

Pages 8 to 10 of the Financial review provide an explanation of the role that financial instruments have had during the year in creating or changing the risks the Group faces in its activities. The explanation summarises the objectives and policies for holding or issuing financial instruments and similar contracts, and the strategies for achieving those objectives that have been followed during the year. No hedge agreements were entered into or transacted during 2001 or 2000.

The numerical disclosures in this note deal with financial assets and financial liabilities as defined in FRS 13 (Derivatives and other financial instruments: disclosures). Certain financial assets such as investments in subsidiary companies are excluded from the scope of these disclosures.

As permitted by FRS 13, short term debtors and creditors have been excluded from the disclosures, other than the currency disclosures.

## Notes to the accounts (continued)

### 22 Derivatives and other financial instruments (continued)

#### Interest rate profile

The currency and interest rate profile of the Group's financial assets excluding short term debtors at 31 December 2001 are as below. Current asset investments comprise institutional cash funds, commercial paper and marketable securities as detailed in note 19.

	Weighted	Weighted			Current	Current	Total
	average	average	Cash	Cash	asset	asset	
	interest	interest	Floating	Fixed rate	invest-	invest-	
	rate	rate	rate	rate	ments	ments	
	Fixed rate	Floating	Floating	Fixed rate	Floating	Fixed rate	£'000
	%	rate	rate	£'000	rate	£'000	£'000
		%	£'000	£'000	£'000	£'000	£'000
Pounds sterling	-	4.1	8,684	-	19,502	-	28,186
US dollars	1.8	2.1	23,564	32,182	308,750	85,543	450,039
Euro	3.1	3.4	4,507	2,815	-	-	7,322
Canadian dollars	3.1	2.5	9,682	-	-	83,602	93,284
			<u>46,437</u>	<u>34,997</u>	<u>328,252</u>	<u>169,145</u>	<u>578,831</u>

The currency and interest rate profile of the Group's financial assets excluding short term debtors at 31 December 2000 are as below. Current asset investments comprise institutional cash funds, commercial paper and marketable securities as detailed in note 19.

	Weighted	Weighted			Current	Current	Total
	average	average	Cash	Cash	asset	asset	
	interest	interest	Floating	Fixed rate	invest-	invest-	
	rate	rate	rate	rate	ments	ments	
	Fixed rate	Floating	Floating	Fixed rate	Floating	Fixed rate	£'000
	%	rate	rate	£'000	rate	£'000	£'000
		%	£'000	£'000	£'000	£'000	£'000
Pounds sterling	-	5.0	5,056	-	-	-	5,056
US dollars	-	6.5	17,978	-	93,550	-	111,528
Euro	-	4.6	4,219	-	-	-	4,219
Canadian dollars	-	5.5	3,906	-	-	-	3,906
Other			35	-	-	-	35
			<u>31,194</u>	<u>-</u>	<u>93,550</u>	<u>-</u>	<u>124,744</u>

The weighted average period for which interest rates are fixed is 69 days in respect of 2001.

## Notes to the accounts (continued)

### 22 Derivatives and other financial instruments (continued)

The interest rate profile of the Group's financial liabilities at 31 December 2001 was as follows:

Currency	Floating £'000	Fixed £'000	Interest free £'000	Total £'000
Canadian dollars				
- Bank loans	1,550	-	-	1,550
- Federal and provincial government loan	-	-	2,131	2,131
US dollars				
- Convertible debt	-	268,178	1,032	269,210
Total	<u>1,550</u>	<u>268,178</u>	<u>3,163</u>	<u>272,891</u>

The convertible notes were issued by Shire Finance Limited, a wholly owned subsidiary of the Company. The Notes are guaranteed by the Company and are convertible into redeemable preference shares of the Issuer which will then be exchanged for either (i) ordinary shares or (ii) American Depository Shares ("ADSs") of the Company or, at the Issuer's option, cash. The Notes bear interest of 2.00 % per annum, paid semi-annually. The effective initial exchange price is £14.107 per ordinary share and approximately £41.544 (\$60.4625) per ADS. Investors have the right, subject to certain conditions, to require the Issuer to redeem the notes at par on 21 August 2004, 2006 or 2008.

The Notes will redeem on 21 August 2011 to the extent that the Notes have not been converted into shares of the Company or redeemed prior to that date.

Weighted average period to maturity of interest free convertible debt is 7 months. The bench mark for determining the interest payments for the floating interest liabilities is Canadian prime rate 4.0% at 31 December 2001.

The interest rate profile of the Group's financial liabilities at 31 December 2000 was as follows:

Currency	Floating rate £'000	Interest free £'000	Total £'000
US dollars			
- Convertible debt	-	2,008	2,008
- Borrowings	83,679	-	83,679
Total	<u>83,679</u>	<u>2,008</u>	<u>85,687</u>

The weighted average period to maturity of the convertible debt is one year.

## Notes to the accounts (continued)

### 22 Derivatives and other financial instruments (continued)

#### Currency exposures

The Group's objectives in managing the currency exposures arising from its net investment overseas (in other words, its structural currency exposures) are to maintain a low cost of borrowings and to retain some potential for currency-related appreciation while partially hedging against currency depreciation. Gains and losses arising from these structural currency exposures are recognised in the statement of total recognised gains and losses.

The table below shows the Group's currency exposures; in other words, those transactional (or non-structural) exposures that give rise to the net currency gains and losses recognised in the profit and loss account. Such exposures comprise the monetary assets and monetary liabilities of the Group that are not denominated in the operating (or "functional") currency of the operating unit involved, other than certain non-sterling borrowings treated as hedges of net investments in overseas operations. As at 31 December 2001 these exposures were as follows:

Functional currency of Group operation	Net foreign currency monetary assets (liabilities)				
	Pounds sterling £'000	US Dollars £'000	Euro £'000	Other £'000	Total £'000
Pounds sterling	-	32,622	2,115	1,400	36,137
Euro	(147)	96	-	-	(51)
Canadian dollars	18,811	24,729	-	-	43,540
	<u>18,664</u>	<u>57,447</u>	<u>2,115</u>	<u>1,400</u>	<u>79,626</u>

The exposures at 31 December 2000 for comparison purposes were as follows:

Functional currency of Group operation	Net foreign currency monetary assets (liabilities)				
	Pounds sterling £'000	US Dollars £'000	Euro £'000	Other £'000	Total £'000
Pounds sterling	-	44,266	1,587	-	45,853
Euro	2,848	155	-	-	3,003
Canadian dollars	-	312	-	-	312
	<u>2,848</u>	<u>44,733</u>	<u>1,587</u>	<u>-</u>	<u>49,168</u>

## Notes to the accounts (continued)

### 22 Derivatives and other financial instruments (continued)

#### *Maturity of financial liabilities*

The maturity profile of the Group's financial liabilities at 31 December 2001 is shown in note 21.

#### *Borrowing facilities*

The Group had undrawn committed borrowing facilities at 31 December 2001, in respect of which all conditions precedent had been met, as follows:

	2001 £'000	2000 £'000
Expiring in less than one year	4,820	-
Expiring in more than two years (note 21 ii)	-	83,679
	<u>4,820</u>	<u>83,679</u>

#### *Fair values*

The market price of the convertible loan stock 2011 as at 31 December 2001 was \$96.85 compared with an issue price of \$100. If the loan is not converted into equity, it would be repayable at \$100 per note. The total fair value of the debt as at 31 December 2001, based on the above market price, was £266 million (\$387 million) compared to a book value of £268 million. There is no material difference between the book values and fair values of all other Group financial assets and liabilities at 31 December 2001. There is no material difference between the book values and fair values of the Group's financial assets and liabilities at 31 December 2000.

#### *Gains on losses and hedges*

The Group had no forward foreign currency contracts outstanding at 31 December 2000 or 31 December 2001.

## Notes to the accounts (continued)

### 23 Called-up share capital

Ordinary shares	Number '000	£'000
<i>Authorised</i>		
At 31 December 2000 – ordinary shares of 5p each	400,000	20,000
At 31 December 2001 – ordinary shares of 5p each	800,000	40,000
<i>Allotted, issued and fully paid</i>		
At 1 January 2001 – ordinary shares of 5p each	257,088	12,854
Issued on exercise of options for cash consideration	11,046	555
Issued on conversion of zero coupon note	295	15
Issued on acquisition of BioChem	179,400	8,970
Issued on exchange of exchangeable shares	33,939	1,697
At 31 December 2001 – ordinary shares of 5p each	481,768	24,091
Special ordinary voting shares (exchangeable shares)	Number '000	£'000
<i>Authorised</i>		
At 31 December 2000	-	-
At 31 December 2001 – special ordinary voting shares of 0.00001p	17,500	-
<i>Allotted, issued and fully paid</i>		
At 1 January 2001	-	-
Issued on acquisition of BioChem	17,292	-
Exchanged for ordinary shares	(11,313)	-
At 31 December 2001	5,979	-

#### *Authorised share capital*

During the year ended 31 December 2001 the authorised share capital of the Company was increased by £20,000,000 and accordingly, the authorised share capital of the Company is £40,000,000 divided into 799,999,965 ordinary shares of 5p each and 17,500,000 Special Ordinary Voting Shares (exchangeable shares) of 0.00001p each.

#### *Issue of ordinary shares*

During the year ended 31 December 2001 the Company allotted 179,400,000 ordinary shares with a nominal value of £8,970,000 in connection with the acquisition of BioChem. The Company allotted a further 33,939,738 ordinary shares with a nominal value of £1,697,000 on the exchange of special ordinary voting shares (exchangeable shares) following the acquisition of BioChem. These shares were issued at a premium of £367,228,000.

During the year ended 31 December 2001 the Company allotted a total of 295,061 ordinary shares with a nominal value of £15,000 to Arenol Corporation (or its nominee broker) in consideration for the conversion of debt. For further details see note 21 above. These shares were issued at a premium of £1,037,000.

## Notes to the accounts (continued)

### **23 Called-up share capital (continued)**

#### *Issue of special ordinary voting shares*

The Company issued 17,292,149 special ordinary voting shares on 11 May 2001 as part of the total consideration for the acquisition of BioChem. Each exchangeable share is equivalent to 3 ordinary shares and is exchangeable into ordinary shares or ADSs, at a rate of one exchangeable share for three ordinary shares or one exchangeable share for one ADS, at any time at the request of the holder. Only BioChem shareholders with Canadian residency had the option to receive exchangeable shares for their shares of BioChem at the time of acquisition. The Exchangeable shares were issued by Shire Acquisition Inc., a company incorporated under the Canada Business Corporations Act, which is a wholly-owned subsidiary of the Group, and is listed on the Toronto Stock Exchange. Holders of the exchangeable shares are entitled to dividend and other rights that are economically equivalent to those of ordinary shares. Through a voting trust and by means of special voting shares in Shire held by the trustee, holders of exchangeable shares are entitled to vote at shareholder meetings of the Company

As at 31 December 2001 5,978,903 exchangeable shares remained unconverted. The Company can redeem all outstanding exchangeable shares for ordinary shares after 31 December 2009, or earlier if the total exchangeable shares fall below 5 million.

The exchangeable shares are included as part of share capital in the consolidated balance sheet to present a true and fair view of the consolidated Group's capital structure, which differs from the Companies Act 1985 requirements (to reflect these amounts as minority interests), as they will become and are equivalent to ordinary shares.

On 15 August 2001 the Company announced that its wholly owned subsidiary Shire Finance Limited had placed an offering of US\$350 million principal amount of Guaranteed Convertible Notes due 2011. The total principal amount was revised to US\$400 million on 17 August 2001. The Notes are guaranteed by the Company and are convertible into redeemable preference shares of Shire Finance Limited which will then be exchanged for either ordinary shares or American Depositary Shares (ADSs) of Shire or cash. The Notes will bear interest of 2 % per annum and the exchange price is \$20.154 per ordinary share (or £14.107 per ordinary share) and \$60.4625 per ADS. Subject to certain conditions, the Notes can be redeemed at par on 21 August 2004, 2006 or 2008.



## Notes to the accounts (continued)

### 23 Called-up share capital (continued)

The Company's Directors and employees have been granted options over ordinary shares under the following share option plans: the Shire Pharmaceuticals Group plc 2000 Executive Share Option Scheme Parts A and B (2000 Executive Scheme), the Shire Holdings Ltd Share Options Scheme (SHL Scheme), the Pharmavene 1991 Stock Option Plan (SLI Plan), the Shire Pharmaceuticals Executive Share Option Scheme (Parts A and B) (Executive Scheme), the Shire Pharmaceuticals Sharesave Scheme (Sharesave Scheme), the Shire Pharmaceuticals Group plc Employee Stock Purchase Plan (Stock Purchase Plan), the Richwood Stock Options Plan (Richwood Plan), the Roberts Stock Option Plans (Roberts Plan) and the BioChem Stock Option Plan (BioChem Plan).

The following table sets forth certain information relating to changes to options outstanding in the year:

Number of ordinary shares of 5p each	As at		Options granted	Options exercised	Options lapsed	As at	
	1 January 2001	Acquisitions				Options granted	Options exercised
SHL Scheme	572,160	-	-	13,720	1,880		556,560
SPC Scheme	48,000	-	-	48,000	-		-
Executive Scheme 'A'	495,326	-	-	100,232	27,975		367,119
Executive Scheme 'B'	5,584,757	-	-	844,463	112,775		4,627,519
Sharesave Scheme	210,999	-	81,888	104,547	10,317		178,023
Stock Purchase Plan	388,852	-	429,026	388,852	-		429,026
SLI Plan	50,294	-	-	6,446	939		42,909
SRI Plan	358,215	-	-	-	-		358,215
Roberts Plan	1,047,809	-	-	232,470	24,425		790,914
2000 Executive Scheme A	2,417	-	219,639	-	21,346		200,710
2000 Executive Scheme B	481,831	-	3,674,536	-	699,788		3,456,579
BioChem Plan	-	14,822,713	-	9,307,878	272,565		5,242,270
	<u>9,240,660</u>	<u>14,822,713</u>	<u>4,405,089</u>	<u>11,046,608</u>	<u>1,172,010</u>		<u>16,249,844</u>

For further details see pages 33 to 35 of the Remuneration Report.

## Notes to the accounts (continued)

### 24 Reserves

#### Group

	Exchangeable shares £'000	Share premium £'000	Capital reserve £'000	Other reserves £'000	Profit and loss account £'000
As at 31 December 2000	-	873,567	2,755	24,247	(109,780)
Prior year adjustment	-	-	-	-	22,272
As at 31 December 2000 restated	-	873,567	2,755	24,247	(87,508)
Issue of exchangeable shares	563,897	-	-	-	-
Exchange of exchangeable shares	(368,925)	367,228	-	-	-
Premium on issue of shares for acquisitions	-	1,941,623	-	-	-
Premium on issue of shares for debt conversion	-	1,037	-	-	-
Issue expenses	-	(23,584)	-	-	-
Options exercised	-	46,409	-	-	-
Foreign exchange adjustment	-	-	-	-	(6,640)
Retained profit for the year	-	-	-	-	35,709
As at 31 December 2001	<u>194,972</u>	<u>3,206,280</u>	<u>2,755</u>	<u>24,247</u>	<u>(58,439)</u>

The cumulative goodwill resulting from acquisitions that has been written off directly to reserves amounts to £208,194,000 as at 31 December 2001 and 31 December 2000.

The capital reserve arose in relation to a Group reconstruction and certain financing transactions, and is not distributable.

## Notes to the accounts (continued)

### 24 Reserves (continued)

#### Company

	Exchangeable Shares £'000	Share premium £'000	Capital reserve £'000	Other reserves £'000	Profit and loss account £'000
As at 31 December 2000	-	873,567	1,674	18,079	(4,373)
Issue of exchangeable shares	563,897	-	-	-	-
Exchange of exchangeable shares	(368,925)	367,228	-	-	-
Premium on issue of shares for acquisitions	-	1,941,623	-	-	-
Premium on issue of shares	-	1,037	-	-	-
Issue expenses	-	(23,584)	-	-	-
Options exercised	-	46,873	-	-	-
Loss for the year	-	-	-	-	1,643
As at 31 December 2001	<u>194,972</u>	<u>3,206,744</u>	<u>1,674</u>	<u>18,079</u>	<u>(2,730)</u>

### 25 Reconciliation of movements in Group shareholders' funds

	2001 £'000	2000 £'000
Profit for the year	35,709	73,202
Other recognised gains and losses relating to the year	(6,640)	15,985
	<u>29,069</u>	<u>89,187</u>
Share capital issued	1,951,648	37,045
Issue of exchangeable shares	563,897	-
Issue expenses	(23,584)	(2,089)
Cost of employee share options	46,961	213
	<u>2,567,991</u>	<u>124,356</u>
Net additions to shareholders' funds		
Opening shareholders' funds as previously stated	803,643	679,287
Prior year adjustment	22,272	-
	<u>825,915</u>	<u>679,287</u>
Opening shareholders' funds as restated		
Closing shareholders' funds	<u>3,393,906</u>	<u>803,643</u>

The cumulative foreign exchange differences on translation amount to £9,056,000 gain as at 31 December 2001 and £15,696,000 gain as at 31 December 2000.

## Notes to the accounts (continued)

### 26 Guarantees, commitments and contingencies

#### (a) Operating leases

The Group leases property, computer and office equipment and motor vehicles on short-term leases. The rents payable under property leases are subject to renegotiation at various intervals specified in the leases. The Group pays for substantially all of the insurance, maintenance and repair of these assets.

The minimum annual rentals under the foregoing leases are as follows:

#### Group

	Land and buildings £'000	Equipment £'000	Motor vehicles £'000
As at 31 December 2001			
Operating leases which expire:			
- within 1 year	768	4	120
- within 2-5 years	522	725	2,277
- after 5 years	-	-	-
	<u>1,290</u>	<u>729</u>	<u>2,397</u>
As at 31 December 2000			
Operating leases which expire:			
- within 1 year	119	1	90
- within 2-5 years	430	581	1,335
- after 5 years	225	-	65
	<u>774</u>	<u>582</u>	<u>1,490</u>

#### Company

	Land and buildings £'000	Motor vehicles £'000
As at 31 December 2001		
Operating leases which expire:		
- within 1 year	145	-
- within 2-5 years	-	114
- after 5 years	-	-
	<u>145</u>	<u>114</u>
As at 31 December 2000		
Operating leases which expire:		
- within 1 year	-	9
- within 2-5 years	-	50
- after 5 years	145	-
	<u>145</u>	<u>59</u>

## Notes to the accounts (continued)

### **26 Guarantees, commitments and contingencies**

#### *(b) Capital commitments*

##### *Fluviral*

The Company has signed a ten-year contract with the Government of Canada to assure a state of readiness in the case of an influenza pandemic (worldwide epidemic) and to provide influenza vaccine for all Canadian citizens in such an event. Under the contract, Shire Biologics will also supply the Government of Canada with a substantial proportion of its annual influenza vaccine requirements over the ten-year period. The value of the agreement may exceed CAN \$300 million over the ten year term, with an option for the Government of Canada to extend the contract period.

The concept of a state of readiness against an influenza pandemic requires the development of sufficient infrastructure and capacity in Canada to provide 100% of domestic vaccine needs in the event of an influenza pandemic. Canada would require 32 million doses of single-strain (monovalent) flu vaccine within a production period of 16 weeks. Shire Biologics will therefore begin expanding its current production capacity in order to meet this objective within a five-year period.

Shire Biologics is committed to £1.9 million (CAN \$4.5 million) of capital expenditure on immovables for the purpose of achieving the level of pandemic readiness required. In addition a performance bond equal to 10% of the minimum estimated contract value in any year would become payable to the Government of Canada if contracted penalty clauses were triggered.

#### *(c) Contingent liabilities*

Shire is involved in various legal proceedings considered typical to its business, including those set out below. Although there can be no assurance regarding the outcome of any of the legal proceedings referred to below, Shire believes that they will not have a materially adverse effect on the Group's financial position.

##### *(i) Phentermine*

Shire US, Inc. (Shire US) has been named as a defendant in approximately 3,784 lawsuits, in both US federal and state courts, which seek damages for, among other things, personal injury arising from phentermine products supplied for the treatment of obesity by Shire US and several other pharmaceutical companies. Shire US has been sued as a manufacturer and distributor of phentermine, an anorectic used in the short-term treatment of obesity and one of the products addressed by the lawsuits. The suits relate to phentermine either alone or together with fenfluramine or dexenfluramine. As at 31 December 2001 Shire US had been named as a defendant in approximately 3,784 cases. Shire US has been dismissed from 3,619 cases. As at 31 December 2001 approximately 111 cases were pending dismissal. The lawsuits generally allege that the defendants marketed phentermine and other products for the treatment of obesity and misled users about the products and territory dangers associated with them; the defendants failed adequately to test phentermine individually and when taken in combination with the other drugs; and the defendants knew or should have known about the negative effects of the drugs and should have informed the public about such risks and/or failed to provide appropriate warning labels.

## Notes to the accounts (continued)

### **26 Guarantees, commitments and contingencies (continued)**

Shire US became involved with phentermine through its acquisition of certain assets of Rexar in January 1994. In addition to Shire US potentially incurring liability as a result of its own production of Oby-Cap, the plaintiffs may additionally seek to impose liability on Shire US as successor to Rexar. Class certification has been sought for certain of the claims made against Shire US. In addition, pending US federal lawsuits have been consolidated as a multi-district litigation in the Eastern District of Pennsylvania. Shire US intends vigorously to defend all the lawsuits and pursue all available reasonable defences. Shire US currently has only one lawsuit pending against it in federal court. Shire US denies liability on a number of grounds including lack of scientific evidence that phentermine, properly described, causes the alleged side effects and that Shire US did not promote phentermine for long-term combined use as part of the “fen/phen” diet. Accordingly, Shire US intends to defend vigorously any and all claims made against the Group in respect of phentermine and believes that liability is neither probable nor quantifiable at this stage of litigation. Legal expenses have been paid by Eon, the supplier to Shire US, or Eon’s insurance carriers but such insurance is now exhausted. Eon has agreed to defend and indemnify Shire US in this litigation pursuant to an agreement dated 30 November 2000 made between Eon and Shire US.

#### (ii) ADDERALL

On 22 September 2000, a lawsuit was filed against Shire in the United States District Court for the District of North Dakota. The suit involves an incident in 1999 in which a young North Dakota man, Ryan Ehlis, shot and killed his infant daughter and wounded himself, allegedly as a result of a psychotic reaction to ADDERALL. Mr Ehlis’ physician had prescribed ADDERALL for the treatment of ADHD. Shire filed its answer to the complaint on 24 November 2000 and discovery related to the litigation is ongoing. Shire intends to robustly defend such action.

On 3 October 2001, a lawsuit was filed against Shire in a Kentucky state court. The lawsuit involves a 34 year old woman who alleges that she experienced a psychotic episode from her ingestion of ADDERALL which led to the death of her child in an auto accident. Shire intends to robustly defend such action.

On 27 July 2001, Shire received service of a complaint filed in state court in Texas that alleged that ADDERALL caused or contributed to a stroke. The plaintiff, an adult female aged 39, was prescribed ADDERALL as treatment for her ADHD. The complaint alleges that the plaintiff used ADDERALL during the period from January 1999 to September 1999. Also named as defendants are two doctors who were involved in diagnosing the plaintiff’s ADHD and for prescribing ADDERALL for its treatment. Discovery in this litigation is ongoing. Shire intends to robustly defend such action.

#### (iii) AGRYLIN

Shire US has been named as a defendant in a recently filed lawsuit in a Texas state court involving AGRYLIN. The complaint was filed in late December and served on Shire on 26 December 2001. Shire’s contract manufacturer for AGRYLIN, Mallinckrodt, Inc., is also a named defendant.

The complaint alleges that the plaintiff suffered a debilitating stroke due to the fact that the plaintiff was allegedly unable to procure this product in some fashion. Shire has filed an answer to the complaint in which it denies the allegations in the plaintiff’s original petition. Shire intends to robustly defend such action.

## Notes to the accounts (continued)

### **26 Guarantees, commitments and contingencies (continued)**

#### (iv) Emory

Shire BioChem is involved in worldwide patent disputes with Emory University (Emory) relating to lamivudine wherein Shire BioChem is opposing certain patents and patent applications of Emory and wherein Emory is opposing certain patents and patent applications of Shire BioChem. Further detail regarding these disputes is provided below. In November 2001, Shire and GlaxoSmithKline (GSK) signed an agreement as to the key terms of a global settlement agreement with Emory. The parties are in the process of finalising the settlement agreement. Pursuant to the settlement agreement, Emory will grant Shire and GSK an exclusive license under Emory's patent rights for lamivudine. The agreement provides for the resolution of the below noted worldwide patent disputes between the parties relating to lamivudine. The settlement involves an upfront payment to Emory by Shire of \$2.5 million and a royalty payment from Shire of 0.5% on worldwide sales of lamivudine over an 11 year period commencing on 1 January 2001 and a licence under Shire's FTC patent rights, in consideration for the settlement of all claims against Shire and GSK relating to lamivudine. The total cost to Shire in 2001 of the settlement (including upfront payment) was \$7.7 million.

Emory filed oppositions to two of Shire BioChem's granted patent applications in Europe which cover oxathiolane nucleosides including lamivudine and dioxolane nucleosides, including troxacitabine, related nucleoside analogues and use of these analogues for treating viral infections. In oral hearings held in 1999, both of these oppositions were dismissed by the Opposition Division of the European Patent Office. Emory is not pursuing its appeal of the decision relating to oxathiolanes. Emory has not to date filed revocation actions with respect to any Shire BioChem lamivudine patents in issue in individual European countries.

Emory has filed an appeal against the dioxolane-related decision and this appeal is pending in the European Patent Office. This appeal does not relate to lamivudine and is not included in the settlement agreement with Emory.

In Japan, Emory filed an opposition to Shire BioChem's granted patent which covers lamivudine, related analogues and use of the analogues for treating viral infections. The Trial Board of the Japanese Patent Office dismissed Emory's opposition to Shire BioChem's patent covering lamivudine. Emory has filed revocation actions in Australia and South Korea against Shire BioChem's granted patents covering lamivudine. Shire BioChem is aggressively defending these patents.

On 23 July 1996, Emory filed a complaint in the US alleging infringement from the commercialization of Eпивir by Shire BioChem and GSK, Shire BioChem's exclusive licensee in the US, of an Emory US patent granted that same day. Shire BioChem considers this patent infringement suit to be without merit and has successfully challenged the validity of Emory's patent.

On 19 May 1998, the USPTO declared an interference between the Emory patent that is the subject of a lawsuit and a pending patent application of Shire BioChem. The Board of Patent Appeals and Interferences issued a decision on 21 December 2000 invalidating Emory's patent. Emory has appealed the decision. Pursuant to the lamivudine settlement agreement, Emory will accept the Board's decision as final and the infringement suit will be dismissed with prejudice.

## Notes to the accounts (continued)

### **26 Guarantees, commitments and contingencies (continued)**

Emory has obtained a granted patent application in Europe relating to oxathiolane nucleosides, including lamivudine. Shire BioChem and GSK filed an opposition to this grant and are vigorously opposing the grant. An examined patent application, filed by Emory claiming lamivudine, was successfully opposed by Shire BioChem in Australia and Norway. Emory has filed an appeal from the Australian decision in the Federal Court of Australia. Shire BioChem also filed an appeal from certain portions of the decision. An examined patent application filed by Emory claiming lamivudine was also opposed by Shire BioChem in Japan. The opposition was dismissed in April 1999 because it was improperly filed by a representative who had previously represented Emory. Notwithstanding the dismissal, the Japanese Patent Office issued an ex-officio action rejecting all of Emory's claims. There can be no assurance that Emory will not be able to overcome this rejection.

An examined patent application filed by Emory claiming lamivudine was opposed by Shire BioChem and GSK in South Korea and such Emory claims to lamivudine were cancelled by the South Korean Patent Office. Shire BioChem is aware that Emory has filed patent applications in other countries, which Shire BioChem believes may claim similar subject matter.

#### (v) Yale

On 23 November 1999, the USPTO declared an interference between Shire's hepatitis B patent for lamivudine and a patent application filed by Yale University (Yale) claiming methods of treating hepatitis B using lamivudine. The Company believes that this application is licensed to Vion Pharmaceuticals, Inc. (Vion), formerly known as OncoRx, Inc., a New Haven, Connecticut-based company. On March 28, 2002, the Board of Patent Appeals and Interferences issued an order awarding priority to the Company's patent. There can also be no reassurance that Yale will not appeal from the Board's judgement on priority against Yale and, if successful, obtain claims in the US directed to methods of treatment for hepatitis B using lamivudine. The Company is not aware of corresponding patent applications by Yale or Vion in countries other than the US.

On 14 April 2000, the USPTO declared a further interference between BioChem's hepatitis B patent for lamivudine and a patent application by GSK claiming methods of treating hepatitis B using lamivudine. There is no guarantee that Shire will be successful in this interference and that Shire's patent will be maintained.



## Notes to the accounts (continued)

### 26 Guarantees, commitments and contingencies (continued)

(vi) Interests in companies and partnerships

The Company has undertaken to subscribe to interests in companies and partnerships for amounts totalling £25,901,000 (\$37,697,000). As at 31 December 2001 an amount of £13,790,000 (31 December 2000: £11,777,000) has been subscribed. In addition, the Company has undertaken to subscribe to additional amounts and pay royalties on certain future sales upon realisation of certain conditions.

(viii) In addition, the Company is involved in other claims and lawsuits in the normal course of business. It is not possible at this time to determine the ultimate outcome of any of these claims.

### 27 Pension arrangements

The Group has a number of defined contribution retirement plans that together cover substantially all employees. The company contribution is fixed as a set percentage of employee's pay. The pension cost charge for the defined contribution schemes for the year was £3,123,000 (2000: £1,705,000). The closing creditor in respect of pension premiums at 31 December 2001 is £521,000 (31 December 2000: £285,000).

The defined benefit plan operated by the Group was a Supplemental Executive Retirement Plan (SERP) for certain US employees of the acquired company, Roberts, who met certain age and service requirements. The plan was discontinued in the prior year and there were no contributions payable in respect of the year 2001.

The Group paid a lump sum of £11.25 million (\$18 million) into the SERP, which was accounted for as a fair value adjustment on the acquisition of Roberts to make good the deficit on this scheme at the time of acquisition. This lump sum payment has led to the Group having no future liability under the SERP, which has been closed to new members with contributions no longer payable by existing members. The asset and liability of £9,872,000 and £7,797,000 respectively are shown in notes 18 and 20 respectively.

### 28 Notes to the consolidated cash flow statement

#### a) Reconciliation of operating profit to net cash flow from operating activities

	Year to 31 December 2001 £'000	Year to 31 December 2000 £'000
Operating profit	76,422	79,657
Exchange gains	(4,315)	(2,314)
Depreciation	7,092	2,523
Amortisation of intangible fixed assets	111,254	33,601
Loss on sale of fixed assets	7,646	-
Write-off of fixed asset investments	500	-
Write-off of intangible fixed assets	3,092	-
Decrease/(increase) in stocks	2,836	(7,004)
Increase in debtors	(44,695)	(38,571)
Increase/(decrease) in creditors	43,044	(14,967)
Net cash inflow from operating activities	<u>202,876</u>	<u>52,925</u>

## Notes to the accounts (continued)

### 28 Notes to the consolidated cash flow statement (continued)

Companies acquired during 2001 contributed £6.3 million (CAN\$14.1 million) outflow to the Group's net operating cashflows, contributed £4.6 million (C\$10.3 million) inflow in respect of net returns on investments and servicing of finance, paid £11.4 million (C\$25.5 million) in respect of taxation and utilised £12.1 million (CAN\$27.0 million) for capital expenditure and financial investments.

No companies were acquired during the year to 31 December 2000.

#### b) Analysis and reconciliation of net debt

Year ended 31 December 2001	Start of year £'000	Acquired in year £'000	Cash flow £'000	Other non-cash changes £'000	Exchange movement £'000	End of year £'000
Cash at bank and in hand	31,194	44,452	6,577	-	(789)	81,434
Debt due within one year	(1,004)	(2,089)	(972)	-	1,057	(3,008)
	<u>30,190</u>	<u>42,363</u>	<u>5,605</u>	<u>-</u>	<u>268</u>	<u>78,426</u>
Debt due after one year	(84,683)	(2,075)	(181,836)	-	(1,289)	(269,883)
	<u>(54,493)</u>	<u>40,288</u>	<u>(176,231)</u>	<u>-</u>	<u>(1,021)</u>	<u>(191,457)</u>
Current assets investments	93,550	81,995	325,479	-	(3,627)	497,397
Net funds	<u>39,057</u>	<u>122,283</u>	<u>149,248</u>	<u>-</u>	<u>(4,648)</u>	<u>305,940</u>

Year ended 31 December 2000	Start of year £'000	Cash flow £'000	Other non-cash changes £'000	Exchange movement £'000	End of year £'000
Cash at bank and in hand	36,038	(7,438)	-	2,594	31,194
Debt due within one year	(9,737)	9,112	-	(379)	(1,004)
Finance leases due within one year	(22)	22	-	-	-
	<u>26,279</u>	<u>1,696</u>	<u>-</u>	<u>2,215</u>	<u>30,190</u>
Debt due after one year	(78,644)	217	-	(6,256)	(84,683)
	<u>(52,365)</u>	<u>1,913</u>	<u>-</u>	<u>(4,041)</u>	<u>(54,493)</u>
Current assets investments	49,850	39,171	-	4,529	93,550
Net (debt)/ funds	<u>(2,515)</u>	<u>41,084</u>	<u>-</u>	<u>488</u>	<u>39,057</u>

## Notes to the accounts (continued)

### 28 Notes to the consolidated cash flow statement (continued)

#### (b) Analysis and reconciliation of net debt (continued)

	Year ended 31 December 2001 £'000	Year ended 31 December 2000 £'000
Increase/(decrease) in cash in the year	6,576	(7,438)
Cash (inflow)/outflow from increase in debt	(182,808)	9,351
Cash outflow from increase in liquid resources	325,479	39,171
Change in net debt resulting from cash flows	149,247	41,084
Cash acquired with subsidiary undertaking	44,452	-
Loans and current asset investments acquired with subsidiary undertakings	77,831	-
Translation difference	(4,647)	488
Movement in net funds /(debt) in year	266,883	41,572
Net funds /(debt) at beginning of year	39,057	(2,515)
Net funds at end of year	305,940	39,057

### 29 Major non-cash transactions

All of the consideration for the acquisition of the subsidiary undertaking made during the year comprised ordinary and exchangeable shares. Further details are given in notes 16, 23 and 24.

### 30 Related party transactions

Related party transactions are discussed in the Remuneration Report on page 26 and in the Directors' report on pages 17 to 18.