

# A drug discovery and development company focused on advancing novel approaches for severe respiratory conditions

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#### Strategy

Using our BioBank platform (our human tissue models of respiratory disease), and our clinical trial capabilities, Synairgen's strategy is to identify novel drug targets, progress them through early stage clinical trials and out-license them to partners for progression to market.



www.synairgen.com

#### **Operational** highlights

#### **Financial** highlights

- · Global exclusive licence agreement signed in June 2014 with AstraZeneca for SNG001 (inhaled interferon beta) for all respiratory indications:
  - \$7.25 million up-front payment
  - · potential development, regulatory and commercial milestones of up to \$225 million
  - · tiered royalties of up to mid-teens on future potential sales
  - AstraZeneca responsible for all future costs
- SNG001 Phase II clinical data published in the American Journal of Respiratory and Critical Care Medicine in July 2014
- Screening of new development opportunities using Synairgen's proprietary "BioBank" platform leveraging Synairgen's world-class founder and KOL respiratory drug discovery and development expertise - several assets identified as potential opportunities for licensing into the Company

- Post-tax profit for the year of £1.2 million (2013: loss £2.0 million), driven by initial receipt from AstraZeneca of \$7.25M (£4.25 million) received in June 2014
- · Research and development expenditure for the year was £1.6 million (2013: £1.3 million)
- · Cash and deposit balances of £9.6 million at 31 December 2014 (2013: £1.3 million)
- · Current funds support the pre-clinical development of key potential opportunities

Up-front payment from AstraZeneca for SNG001



Post-tax profit for 2014

## Strategic Report

#### **Principal activities**

Synairgen plc is the holding company for Synairgen Research Limited, a respiratory drug discovery and development company.

## Strategic Report



#### **Operating Review**

#### **Summary**

The year has been transformational for Synairgen. The successful licensing of Synairgen's inhaled interferon beta (IFN-beta, formerly known as SNG001) programme to AstraZeneca in June demonstrates Synairgen's competence in identifying and developing early stage assets to a point of commercial value and typifies the potential of our business model.

During the year, Synairgen's team, including its world-leading respiratory drug discovery and development experts, have screened approximately 30 new assets from around the globe. Some of the assets have been identified as potential opportunities for bringing into the Company for development and then for future licensing out to large pharmaceutical company partners for late stage development and marketing. To support this development activity Synairgen raised an additional £5.3 million in July 2014.

#### Inhaled IFN-beta and the licensing agreement with AstraZeneca

In June 2014, Synairgen signed a global exclusive licence agreement with AstraZeneca, a major franchise holder in the respiratory sector, for which it received an upfront payment of \$7.25 million, and will receive potential further development, regulatory and commercial milestones of up to \$225 million. In addition, Synairgen will receive tiered royalties on sales, which escalate to the mid-teens



percentage level. Being a novel therapy in an area of respiratory disease where there is a great unmet medical need, it is not possible at this stage to be definitive about the potential size of the market, however, the health economics and the size of the target patient group indicate that an efficacious therapy of this type could command peak sales in excess of \$1 billion per annum.

AstraZeneca is now responsible for all future development activities and costs associated with this programme. AstraZeneca's reference for the inhaled IFN-beta programme is AZD9412.

#### The need for AZD9412

Despite taking inhaled corticosteroids, asthmatics are still susceptible to exacerbations (worsening of asthma symptoms). Respiratory virus infections (e.g. the common cold) are a major trigger for exacerbations and there are limited satisfactory treatments available to address this significant unmet medical need, which is associated with a significant proportion of healthcare spending on asthma. Clinical data generated from trials to date shows that this compound supports or boosts the immune system by correcting a deficiency which makes patients vulnerable to respiratory tract viral infections. The clinical need for a drug that helps chronic obstructive pulmonary disease (COPD) patients during viral infections is perhaps even greater due to the high morbidity associated with exacerbations/hospitalisations of their disease.

#### IFN-beta deficiency

Asthmatics do not get more respiratory viral infections (common colds) than non-asthmatics, but infections are more likely to worsen inflammation in the lungs and cause exacerbations. Professor Donna Davies (one of the three Synairgen academic founders) and colleagues at the University of Southampton and Imperial College London found that lung models using cells from asthmatic volunteers were more vulnerable to virus infection. In these models, lung cells from asthmatics produced lower amounts of the key antiviral defence protein IFN-beta during virus infections. This offered a potential explanation for why the lungs of asthmatics are affected more by respiratory virus infections, and by simply adding a small amount of IFN-beta to cultures of lung cells from asthmatics it was shown that antiviral responses were improved. This suggested that direct delivery of IFN-beta to the lungs of asthmatics by inhalation during a respiratory virus infection could limit the spread of the virus to the lungs and also ultimately reduce the number of asthma exacerbations and potentially COPD exacerbations.

## Strategic Report (continued)

#### Steps completed by Synairgen

#### Pre-clinical development

Synairgen used its models of lung disease to confirm the potential utility of inhaled IFN-beta against many common respiratory viruses including rhinovirus strains, RSV, and influenza strains, and worked with other groups to test IFN-beta against highly pathogenic strains of influenza and a coronavirus (MERS). Synairgen also used the models to study various dosing regimens and to develop biomarkers for clinical trials in asthmatic patients.

#### Phase I clinical trials

Synairgen developed an inhaled form of IFN-beta and progressed it into clinical trials. Synairgen's Phase I trials showed that inhaled IFN-beta was well tolerated at varying dose levels. Analysis of biomarkers showed that inhaled IFN-beta successfully boosted the immune system.

#### Phase II clinical trial

The Phase II trial recruited patients from a broad spectrum of asthma patients and patients were treated with IFN-beta or placebo at the onset of cold symptoms. One of the major findings from the trial was that milder and moderate patients do not appear to suffer the same degree of symptom deterioration (measured with the Asthma Control Questionnaire (ACQ)) as more severe patients (characterised as those taking higher doses of maintenance asthma therapy). The ACQ was used as the primary end point for the trial. A statistically significant difference in ACQ (p=0.004) was evident in the more severe patients (defined as Step 4 and Step 5 asthmatics according to the British Thoracic Society classifications), which are estimated to

represent between 10% and 20% of all adult asthma sufferers. In these patients, there was also a lung function benefit in favour of inhaled IFN-beta and there appeared to be fewer severe exacerbations. Biomarkers of lung inflammation were also lower in patients receiving inhaled IFN-beta.

These results have now been published in the American Journal of Respiratory and Critical Care Medicine, a prestigious peer-reviewed journal (Djukanovic R, Harrison T, Johnston SL, Gabbay F, Wark P, Thomson NC, Niven R, Singh D, Reddel HK, Davies DE, et al. The effect of inhaled interferon-beta on worsening of asthma symptoms caused by viral infections: a randomised trial. Am | Respir Crit Care Med 2014;190:145-154).

We believe the inhaled IFN-beta programme is considerably de-risked compared to many programmes at this stage of development, firstly because of its use by injection for the last two decades in multiple sclerosis (thereby accumulating a significant safety record), and secondly because it is targeting what is recognised to be the major cause of asthma exacerbations.

#### AstraZeneca activities

AstraZeneca are due to commence an international Phase II trial during 2015. This Phase II trial is expected to recruit patients from the Step 4 and 5 asthma population who are at particular risk of experiencing exacerbations caused by cold viruses. Synairgen estimates that the trial is expected to produce results in the early part of 2017. AZD9412 also provides the opportunity to expand the clinical programme into other pulmonary diseases, including COPD.

#### Synairgen's new pipeline developments

As yet undisclosed programmes are currently being assessed by Synairgen. Synairgen is using its expertise, models, and understanding of asthma, COPD and respiratory biology to assess novel opportunities to which our platform and development experience can add significant value. The team has screened approximately 30 new assets from around the globe during the past 12 months and after deeper due diligence, several assets have been identified as potential opportunities for licensing into the Company. Synairgen will use its BioBank of clinical samples of blood, sputum, biopsies and bronchial epithelial cells obtained from a selection of well-characterised asthma and COPD volunteers and healthy control subjects in models of respiratory disease to validate drug targets, tailor treatment approaches to patient groups (personalised medicine), and use the models to progress compounds towards early stage clinical trials.

A number of the shortlisted programmes are at a stage where initial clinical trials could be commenced in 2016. They are all of a potential market size and utility to be attractive to large pharmaceutical companies – fitting with Synairgen's partnering model.

#### **Key performance indicators**

The Board considers that the most important KPIs are non-financial and relate to the progress of the scientific programmes which are discussed in the preceding section of this report.

The most important financial KPIs are the cash position and operating result of the Group. At 31 December 2014 cash and deposit balances amounted to £9.60 million (2013: £1.29 million) and were above budgeted levels. The operating profit of £1.09 million (2013: loss of £2.28 million) was also favourable to the budgeted result for the year.





The successful licensing of Synairgen's inhaled interferon beta (IFN-beta, formerly known as SNG001) programme to AstraZeneca in June demonstrates Synairgen's competence in

# ENTIFYING & EVELOPING

early stage assets to a point of commercial value and typifies the potential of our business model

## Strategic Report (continued)



#### **Financial Review**

The Financial Review should be read in conjunction with the consolidated financial statements of the Company and Synairgen Research Limited (together the 'Group') and the notes thereto on pages 29 to 42. The consolidated financial statements are presented under International Financial Reporting Standards as adopted by the European Union. The financial statements of the Company continue to be prepared in accordance with UK Generally Accepted Accounting Practice and are set out on pages 43 to 46.

#### **Statement of Comprehensive Income**

The profit from operations for the year ended 31 December 2014 was £1.09 million (2013: loss £2.28 million). Revenues of £4.29 million (2013: £nil) comprised the upfront payment from AstraZeneca (as discussed above) of £4.25 million and £0.04 million of scientific fee for service work for AstraZeneca. Research and development expenditure for the year amounted to £1.65 million (2013: £1.29 million) and was incurred in relation to the interferon beta programme and research into the new opportunity candidates.

Other administrative costs for the year amounted to £1.55 million (2013: £0.99 million), with the increase over the prior year being attributable to business development costs and staff costs. On account of the Group being in profit, there was a reduction in the research and development tax credit from £0.22 million to £0.06 million. The profit after tax for the year was £1.19 million (2013: loss of £2.04 million) and the basic earnings per share amounted to 1.42p (2013: loss of 2.72p).

#### **Fundraisings**

During the year, there were two fundraisings. In March 2014, the Company raised £1.50 million (gross) through the issue of 3.13 million shares at a price of 48p to provide working capital to progress its outlicensing discussions through to a conclusion. Costs of the issue amounted to £0.08 million. In July 2014, the Company raised a further £5.31 million (gross) through the issue of 10.63 million shares at a price of 50p to enable it to progress new development opportunities. Costs of this issue were £0.33 million.

#### Statement of Financial Position and cash flows

At 31 December 2014, net assets amounted to £9.44 million (2013: £1.58 million), including net funds, as detailed below in Capital structure and funding, of £9.60 million (2013: £1.29 million).

The principal elements of the £8.31 million increase over the year ended 31 December 2014 (2013: £1.80 million decrease) in net funds were:

- Cash generated from operations of £1.61 million (2013: £2.04 million outflow);
- · Research and development tax credits received of £0.20 million (2013: £0.24 million);
- · Share issue proceeds (net of costs) £6.51 million (2013: £nil).

#### **Capital structure and funding**

The Group is funded by equity capital, reflecting the early stage nature of its discovery and development programmes.

The Group considers its capital to be its total equity, which at 31 December 2014 amounted to £9.44 million (2013: £1.58 million). The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns to equity holders of the Company and benefits to other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Group manages this objective through tight control of its cash resources and, upon reaching significant drug development programme milestones (to decrease investment risk), by raising additional equity from shareholders to meet its forecast future cash requirements.

Net funds held by the Group at 31 December 2014 amounted to £9.60 million and comprised cash and cash equivalents, short-term deposits (with original maturities of greater than three months and less than one year) as shown below:

				31 Dec
	2014	2013	2012	2011
	£m	£m	£m	£m
Short-term deposits	6.75	0.46	1.43	2.45
Cash and cash equivalents	2.85	0.83	1.66	0.90
Net funds	9.60	1.29	3.09	3.35

The Group did not have any bank borrowings as at 31 December 2014 (2013: £nil).

There have been seven significant issues of shares with the following amounts (net of costs) raised: £0.62 million (August 2003); £8.98 million (from IPO on AIM in October 2004); £6.20 million (June 2009); £2.50 million (June 2011); £2.35 million (July 2012); £1.42 million (March 2014); and £4.98 million (July 2014). The other major sources of funding received by the Group from the formation of the business until 31 December 2014 have been: revenues from licensing transactions of £4.25 million, research and development tax credits of £2.66 million. bank interest of £1.63 million, and revenues from collaborative work of £0.64 million.

#### Treasury policy and financial risk management

#### Credit risk

The Group follows a risk-averse policy of treasury management. Sterling deposits are held with one or more approved UK-based financial institutions and in the Institutional Cash Series plc Institutional Sterling Liquidity Fund managed by BlackRock Investment Management (UK) Limited. The Group's primary treasury objective is to minimise exposure to potential capital losses whilst at the same time securing prevailing market rates.

#### Interest rate risk

The Group's cash held in current bank accounts is subject to the risk of fluctuating base rates. An element of the Group's financial assets is placed on fixed-term interest deposits. The interest rate profile of financial assets is illustrated in note 16 to the financial statements.

#### Currency risk

During the year under review, the Group was exposed to US dollar currency movement as the AstraZeneca upfront payment was made in dollars and to Euro currency movement as a small element of its research and development expenditure is denominated in this currency. The US dollars from AstraZeneca were converted into Sterling upon receipt. The Group does not routinely hedge against its exposure in Euros as the amounts involved have not been significant.

## Strategic Report (continued)

#### **Principal risks** and uncertainties

The Board considers that the principal risks and uncertainties facing the Group may be summarised as follows:

· Reliance on the interferon beta programme The Group's most significant drug development programme is the interferon beta programme, which is now being developed by AstraZeneca, following the significant investment by the Group.

The Group is reviewing a number of additional development opportunities which it hopes to in-license and thereby broaden and diversify its portfolio.

 Failure to generate innovative discoveries There can be no guarantee that the Group will successfully develop new pharmaceutical products.

#### · Loss of the BioBank

The Group's BioBank of well-characterised human tissue, which has been built up over several years, is a key element of its technology platform and is very important in relation to the development of future opportunities.

The Group follows a defined policy to minimise the chances of loss of the BioBank, including storing it in a number of different locations at Southampton General Hospital and monitoring the storage temperature 24 hours a day.

· Clinical development and regulatory risk The development of pharmaceutical drugs

requires the necessary safety and efficacy to be demonstrated in clinical programmes in order to meet the requirements of the appropriate regulatory bodies. There can be no guarantee that the necessary safety or efficacy will be demonstrated or that the clinical trials will not be delayed or extended. There can be no guarantee that any of the Group's therapies will be able to obtain or maintain the necessary regulatory approvals.

The Group seeks to reduce this risk by closely monitoring the progress of recruitment on its clinical trials, drawing on the experience of its Founders, seeking advice from regulatory advisers, and holding consultations with the appropriate regulatory bodies.

#### · Intellectual property risk

The commercial success of the Group depends on its ability to obtain patent protection for its pharmaceutical discoveries in the US, Europe and other countries and to preserve the confidentiality of its know-how. There is no guarantee that patent applications will succeed or be broad enough to provide protection for the Group's intellectual property rights and exclude competitors with similar pharmaceutical products. The success of the Group is also dependent on non-infringement of patents, or other intellectual property rights, held by third parties. Competitors and third parties may hold intellectual property rights which the Group may not be able to license upon favourable terms, potentially inhibiting the Group's ability to develop and exploit its own business. Litigation may be necessary to protect the Group's intellectual property which may result in substantial costs.

The Group seeks to reduce this risk by seeking patent attorney advice that patent protection will be available prior to investing in a project, by seeking patent protection where appropriate and by minimising disclosure to third parties.

#### · Commercial risk

There can be no guarantee that the Group will succeed in securing and maintaining the necessary contractual relationships with licensing partners for its programmes under development. Even if the programmes are successfully out-licensed and pharmaceutical products are brought to market by a partner, there is no guarantee that such products will succeed in the marketplace.

The Group seeks to reduce this risk by structuring its development programmes to meet the needs and requirements of its potential partners and by engaging with partners who have the appropriate experience, resource and interest to bring such pharmaceutical products to the global marketplace.

#### Competition risk

The Group's current and potential competitors include pharmaceutical and biotechnology companies and academic institutions, many of whom have significantly greater financial resources than the Group. There can be no assurance that competitors will not succeed in developing products that are more effective or economic than any developed by the Group, or which would render the Group's products non-competitive or obsolete.

#### Funding risk

The Group continues to consume cash resources. Until the Group generates positive net cash inflows from successful out-licensing transactions and commercialisation of its products, it remains dependent upon securing additional funding through the injection of capital from share issues. The Group may not be able to generate positive net cash flows in the future or attract such additional funding required at all, or on suitable terms. In such circumstances, the Group's discovery and development programmes may be delayed or cancelled and the business operations curtailed.

The Group seeks to reduce this risk through tight financial control, prioritising programmes which will generate the best returns and keeping shareholders informed on progress.

## • Dependence on Founders, senior management and key staff

The Founders and certain members of staff are highly skilled scientists and clinicians. The Group has deliberately pursued a lean headcount policy to conserve financial resources. Failure to continue to attract and retain such individuals could adversely affect operational results.

The Group seeks to reduce this risk by appropriate incentivisation of staff through participation in long term equity incentive schemes.

#### Outlook

We are delighted with the progress Synairgen has made this year with the licensing deal of our novel therapeutic, inhaled IFN-beta, for development and commercialisation at AstraZeneca.

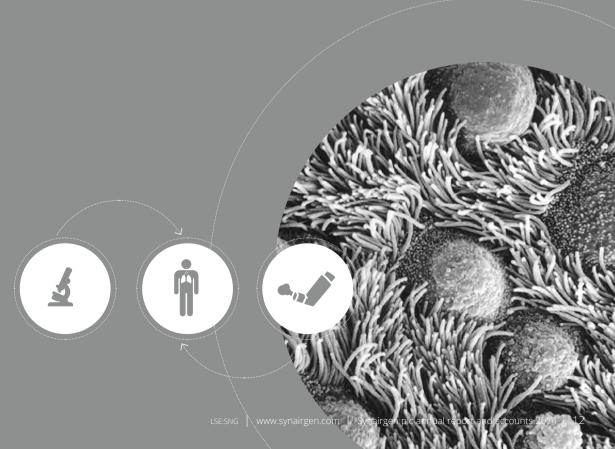
We are engaged in due diligence on a number of novel development opportunities to which Synairgen's platform could add significant value in the near and medium term and we expect a number of these to enter our development pipeline during the coming period.

By order of the Board

#### John Ward

Company Secretary

2 March 2015



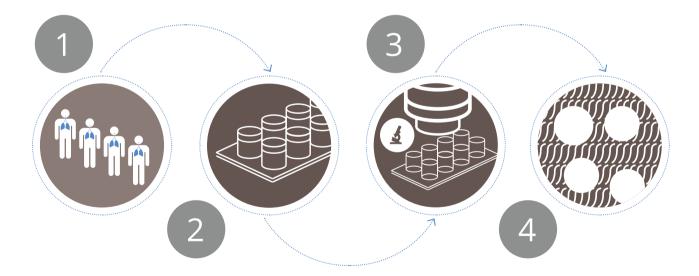
Our proven business model and the ability to successfully recreate the human lung in the laboratory, is unlocking the potential in a number of other drug development opportunities

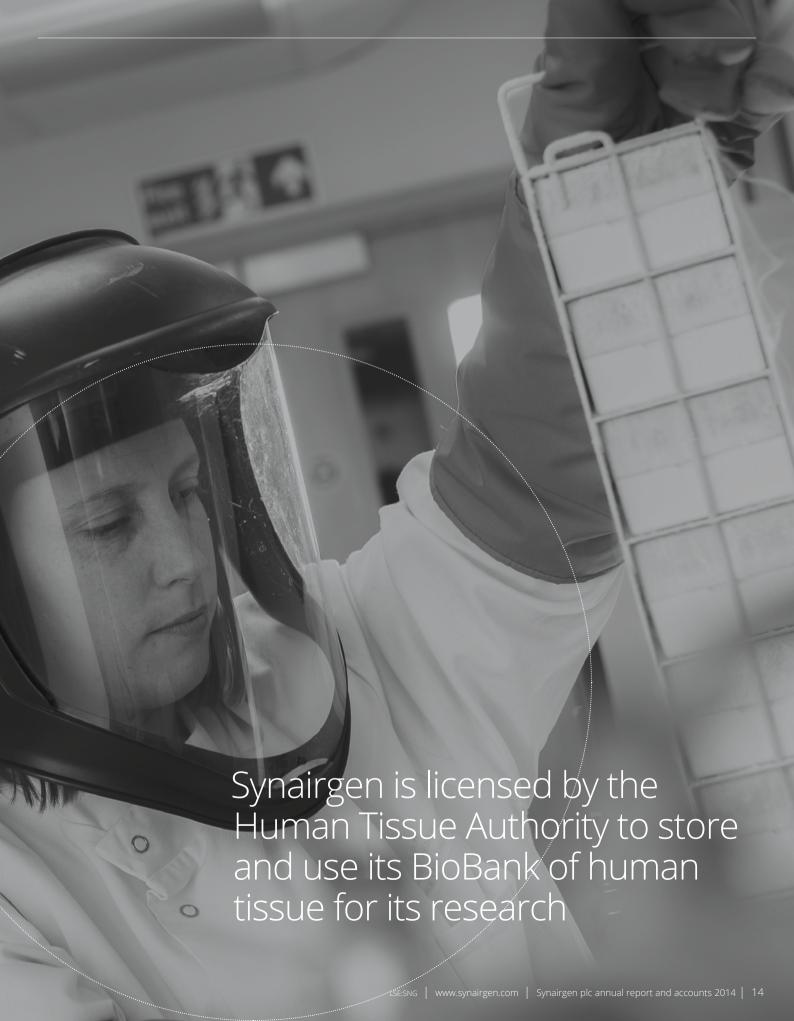
BioBank samples are obtained from volunteer patients attending specialist clinical research facilities at Southampton General Hospital

Synairgen's BioBank contains blood, sputum, lung cells and tissue samples collected from subjects with asthma and COPD and controls

BioBank samples are used to create in vitro human respiratory cell and tissue models to discover, develop and validate novel drug targets

Cultured epithelial cells grown at an air-liquid interface showing cilia and mucus-secreting cells





#### **Simon Shaw**

Non-executive Chairman

Simon Shaw joined Synairgen as executive Chairman on its inception in June 2003 and became non-executive Chairman in October of that year. He is Group Chief Financial Officer of Savills plc. He was Chief Financial Officer of Gyrus Group PLC from 2003 until its sale to Olympus Corporation in 2008, having previously been Chief Operating Officer of Profile Therapeutics plc between 1998 and 2003. Between 1991 and 1997 he was a corporate financier, latterly at Hambros Bank Limited. He is a chartered accountant.

#### **Richard Marsden**

Chief Executive Officer

Richard Marsden joined Synairgen in a consulting role as General Manager in November 2003, was appointed to the Board as Managing Director in June 2004 and appointed Chief Executive Officer in September 2009. Between 1998 and 2003 he worked as Projects Manager and Cystic Fibrosis Business Development Manager at Profile Therapeutics plc, where he managed the Cystic Fibrosis business and played a major role in the development of its proprietary pharmaceutical unit, Profile Pharma Limited. Prior to this, he worked for Zimmer Limited, Genentech (UK) Limited and Roche Products Limited.

#### **Dr Phillip Monk**

Chief Scientific Officer

Phillip Monk joined Synairgen in October 2006 as Head of Bioscience Development and was appointed to the Board as Chief Scientific Officer in September 2009. Phillip was previously Director of the Respiratory and Inflammation Biology group at Cambridge Antibody Technology ('CAT') and led the scientific development of CAT-354, an anti-IL-13 antibody being developed for the treatment of severe asthma. Prior to joining CAT, he worked at Bayer AG within the respiratory disease therapeutic area, focusing on the development of novel therapies for asthma, COPD and cystic fibrosis.

#### John Ward

Finance Director

John Ward joined Synairgen in October 2004 as Finance Director. From December 1999 to July 2004 he was Chief Financial Officer and Company Secretary of Profile Therapeutics plc and was appointed to the Profile Therapeutics board in March 2003. From 1996 to 1999 he was Finance Director of Rapid Deployment Group Limited, the UK holding company for the healthcare operations of Ventiv Health, Inc. Prior to joining Rapid Deployment he was a Director of Corporate Finance at Price Waterhouse. He is a chartered accountant.

## Directors









#### **lain Buchanan**

Non-executive Director

lain Buchanan was appointed as a nonexecutive director in June 2010 and is currently Chief Executive Officer of NOXXON Pharma AG based in Berlin. Previously he was Chief Executive Officer of Novexel SA ('Novexel'), a specialty pharmaceutical company focused on novel antiinfectives, from its formation in 2004 until 2010, when it was sold to AstraZeneca. He has some 35 years' commercial experience in the pharmaceutical and biotech industries. He joined Novexel from Vertex Pharmaceuticals (Europe) Limited, where he was Managing Director. Prior to Vertex, lain was the Regional Licensing Director of Cilag A.G. International, a division of Johnson & Johnson based in Switzerland, where he managed Cilag's international licensee business from 1987 to 1994.

#### Dr Bruce Campbell

Non-executive Director

Bruce Campbell joined Synairgen as a non-executive Director in April 2006. He has 40 years of drug development experience and has developed many drugs in a wide range of indications which are now on the market. He currently acts as a consultant to various companies including Proximagen Limited. Formerly he was Senior VP of International Development at Neurocrine Biosciences, Inc. ('Neurocrine'). Prior to joining Neurocrine he worked for 27 years at Servier (United Kingdom), latterly as Scientific Director. In addition, he has also been a director and European Chairman of the Drug Information Association, a member of the European ICH Safety Working Party and a scientific advisor to IP Group plc. He is a visiting Professor in Pharmacology at King's College, London.

#### **Paul Clegg**

Non-executive Director

Paul Clegg was appointed as a non-executive director of Synairgen in September 2009. He is Chief **Executive Officer of Accsys** Technologies PLC, Chairman of Tricoya Technologies Ltd and a non-executive director of Peel Hunt LLP. Paul was previously Managing Director and Chief Executive Officer of Cowen International Limited and director of Cowen Asset Management Limited until June 2008. After over twenty years working in the investment banking industry, Paul joined Accsys Technologies PLC, a UK publicly quoted company in the chemical sector, which has developed the process and the commercial industrialisation of wood acetylation. He has successfully turned around, refinanced and repositioned the company.

#### **Prof. Stephen Holgate CBE**

Non-executive Director

Stephen Holgate is a co-founder of Synairgen and was appointed a non-executive director in June 2003. After qualifying in Medicine at Charing Cross Hospital Medical School, London he has pursued an academic career leading to his appointment in 1987 to his current position as Medical Research Council Clinical Professor of Immunopharmacology at the University of Southampton. His research interests have been largely focused on the cellular and molecular mechanisms of asthma that has involved use of both epidemiological and genetic approaches. He has published over 1,000 papers in peerreviewed literature.

He is currently: Chairman of the MRC Translational Research Group: Member of the MRC Strategy Board; Member of the Science Europe Medical Science Committee and Horizon 2020 Health Science Panel: Chairman of the European Respiratory Society Scientific Council; Board Chair of the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs): Chairman of Defra's Hazardous Substances Advisory Committee; Trustee of Cancer Research UK, the British Lung Foundation and The Kennedy Trust for Rheumatology Research: and a scientific board member or advisor to a number of companies, including Amgen, Takeda, Merck, and Novartis. In 2010, he was appointed by the Higher Education Funding Council for England to be the Chair of the Research Excellence Framework (REF2014) Main Panel A covering Medicine, Health and Life Sciences.









Synairgen's Founders



**Prof. Stephen Holgate** CBE is MRC Clinical Professor of Immunopharmacology at the University of Southampton



**Prof. Ratko Djukanovic** is Professor of Medicine at the University of Southampton and Director of the Southampton NIHR Respiratory Biomedical Research Unit

#### **Prof. Donna Davies**

is Professor of Respiratory Cell and Molecular Biology at the University of Southampton

## Directors' Report

The directors present their report and the audited financial statements for Synairgen plc (the 'Company') and its subsidiary (together the 'Group') for the year ended 31 December 2014.

There are a number of items required to be included in the Directors' Report, which are covered elsewhere in the annual report.

The following are covered in the Strategic Report:

- Principal activities
- · Review of the business and future developments
- Key performance indicators
- · Principal risks and uncertainties
- The use of financial instruments and financial risk management policies (also in note 16 to the financial statements)

Details of directors' remuneration and share options are given in the Directors' Remuneration Report.

#### **Research and development**

During the year ended 31 December 2014, the Group has invested £1,649,000 (2013: £1,292,000) in research and development activities and a review of this expenditure is included in the Strategic Report.

#### **Dividends**

The directors do not propose the payment of a dividend.

#### **Substantial shareholdings**

As at 2 March 2015, the Company had been advised of the following shareholders with interests of 3% or more in its ordinary share capital:

Name of shareholder	Number of ordinary shares	% of share capital
Woodford Investment Management LLP	18,286,651	20.0%
Lansdowne Partners International Ltd	16,923,111	18.5%
Standard Life Investments (Holdings) Ltd	5,591,000	6.1%
Southampton Asset Management Ltd	3,600,000	3.9%

#### **Directors**

The directors of the Company during the year ended 31 December 2014 were:

Executive directors:

Richard Marsden (Chief Executive Officer) Dr Phillip Monk (Chief Scientific Officer) John Ward (Finance Director)

Non-executive directors:

Simon Shaw (Chairman) Iain Buchanan Dr Bruce Campbell Paul Clegg

Prof. Stephen Holgate CBE

#### **Directors' interests in ordinary shares**

The directors, who held office at 31 December 2014, had the following interests in the ordinary shares of the Company:

	31 December 2014 Number of shares	1 January 2014 Number of shares
Richard Marsden	110,972	110,972
Dr Phillip Monk	161,710	28,592
John Ward	243,912	243,912
Simon Shaw (i)	1,408,879	1,408,879
Iain Buchanan	112,741	112,741
Dr Bruce Campbell (ii)	294,259	294,259
Paul Clegg (iii)	204,244	204,244
Prof. Stephen Holgate (iv)	858,360	858,360

- (i) Simon Shaw's shareholding includes 40,299 shares held in his pension plan.
- (ii) Dr Bruce Campbell's shareholding includes 40,299 owned by his wife,
- (iii) Paul Clegg's shareholding includes 180,149 shares held in his pension plan.
- (iv) Prof. Stephen Holgate's shareholding includes 1,923 shares owned by his wife, Elizabeth Holgate.

Between 31 December 2014 and the date of this report there has been no change in the interests of directors in shares or share options as disclosed in this report.

#### Directors' and officers' liability insurance

Qualifying indemnity insurance cover has been arranged in respect of the personal liabilities which may be incurred by directors and officers of the Group during the course of their service with the Group. This insurance has been in place during the year and on the date of this report.

#### **Political donations**

During the year ended 31 December 2014, the Group made no political donations (2013: £nil).

#### **Auditors**

All of the current directors have taken all the steps that they ought to have taken to make themselves aware of any information needed by the Company's auditors for the purposes of their audit and to establish that the auditors are aware of that information. The directors are not aware of any relevant audit information of which the auditors are unaware.

By order of the Board

#### John Ward

Company Secretary 2 March 2015

## Corporate Governance

The Board is accountable to the Company's shareholders for good corporate governance and it is the objective of the Board to attain a high standard of corporate governance. As an AIM-quoted company, full compliance with The UK Corporate Governance Code (the 'Code') is not a formal obligation. The Company has not sought to comply with the full provisions of the Code, however it has sought to adopt the provisions that are appropriate to its size and organisation and establish frameworks for the achievement of this objective. This statement sets out the corporate governance procedures that are in place.

#### **Board of Directors**

On 31 December 2014 the Board of directors (the 'Board') consisted of a non-executive Chairman (Simon Shaw), three executive directors (Richard Marsden, Dr Phillip Monk and John Ward), and four nonexecutive directors (lain Buchanan, Dr Bruce Campbell, Paul Clegg and Prof. Stephen Holgate). Brief details about the directors are given on pages 15 and 16. The responsibilities of the non-executive Chairman and the Chief Executive Officer are clearly divided. The non-executive directors bring relevant experience from different backgrounds and receive a fixed fee for their services and reimbursement of reasonable expenses incurred in attending meetings.

The Board retains full and effective control of the Group. This includes responsibility for determining the Group's strategy and for approving budgets and business plans to fulfil this strategy. The full Board ordinarily meets seven times a year ('Scheduled Board meetings'). It also meets on any other occasions it considers necessary. During the year ended 31 December 2014, the Board met seven times for Scheduled Board meetings, with each member attending as follows:

Director	Number of meetings held whilst a Board member	Number of meetings attended
Simon Shaw	7	6
Richard Marsden	7	7
Dr Phillip Monk	7	7
John Ward	7	7
lain Buchanan	7	7
Dr Bruce Campbell	7	6
Paul Clegg	7	7
Prof. Stephen Holgate	7	5

In addition there were seven other meetings, to which Board members were invited, during the year.

It is the duty of the Chairman to ensure that all directors are properly briefed on issues arising at Board meetings. Prior to each Board meeting, directors are sent an agenda and Board papers for each agenda item to be discussed. Additional information is provided when requested by the Board or individual directors.

The Company Secretary is responsible to the Board for ensuring that Board procedures are followed and that the applicable rules and regulations are complied with. All directors have access to the advice and services of the Company Secretary, and independent professional advice, if required, at the Company's expense. Removal of the Company Secretary would be a matter for the Board.

As appropriate, the Board has delegated certain responsibilities to Board committees

#### **Audit Committee**

The Audit Committee currently comprises Simon Shaw (Chairman), lain Buchanan and Dr Bruce Campbell. Whilst it is not normal in larger companies for the chairman of the Company to chair the Audit Committee, the Company considers it appropriate for Simon Shaw to be Chairman as he is considered to have the most significant, recent and relevant financial experience of the non-executive directors.

The committee has primary responsibility for ensuring that the financial performance of the Group is properly measured and reported on and it reviews the interim financial information and annual financial statements before they are submitted to the Board. The committee reviews accounting policies and material accounting judgements. The committee also reviews, and reports on, reports from the Group's auditors relating to the Group's accounting controls. It makes recommendations to the Board on the appointment of auditors and the audit fee. The committee monitors the scope, results and cost-effectiveness of the audit. It has unrestricted access to the Group's auditors. In certain circumstances it is permitted by the Board for the auditors to supply non-audit services (in the provision of tax advice, or on specific projects where they can add value). The committee has approved and monitored the application of this policy in order to safeguard auditor objectivity and independence. The overall fees paid to the auditors are not deemed to be of such significance to them as to impair their independence. The Group does not have an internal audit function, but the Board considers that this is appropriate, given the size of the Group. The committee keeps this matter under review annually. During the year ended 31 December 2014, the committee met four times with each member attending all meetings.

#### **Remuneration and Nomination Committee**

The Remuneration and Nomination Committee currently comprises Paul Clegg (Chairman), Dr Bruce Campbell and Simon Shaw. The committee is responsible for making recommendations to the Board on remuneration policy for executive directors and the terms of their service contracts, with the aim of ensuring that their remuneration, including any share options and other awards, is based on their own performance and that of the Group generally. The committee administers the Long-Term Incentive Plan, the staff share option scheme and the Qualifying Non-Employee Option Scheme and approves grants under all three schemes. It also advises on the remuneration policy for the Group's employees.

## Corporate Governance (continued)

The committee is responsible for all senior appointments that are made within the Group. During the year ended 31 December 2014, the committee met six times with each member attending as follows:

Director	Number of meetings held whilst a Committee member	Number of meetings attended
Paul Clegg	6	6
Dr Bruce Campbell	6	4
Simon Shaw	6	5

#### **Investor relations**

The directors seek to build a mutual understanding of objectives between the Company and its shareholders by meetings with major institutional investors and analysts after the Company's preliminary announcement of its year-end results and its interim results. The Company also maintains investor relations pages on its website (www. synairgen.com) to increase the amount of information available to investors. During the year the Company has presented at a number of meetings and conferences aimed primarily at private investors to broaden awareness of the Company.

There is an opportunity at the Annual General Meeting for individual shareholders to question the Chairman, the Chairmen of the Audit and Remuneration and Nomination committees, and the executive directors. Notice of the meeting is sent to shareholders at least 21 clear days before the meeting. Shareholders are given the opportunity to vote on each separate issue. The Company counts all proxy votes and will indicate the level of proxies lodged on each resolution, after it has been dealt with by a show of hands. Details of the resolutions and explanations thereto are included with the notice.

#### **Internal control**

The directors are responsible for establishing and maintaining the Group's system of internal control and reviewing its effectiveness. The system of internal control is designed to manage, rather than eliminate, the risk of failure to achieve business objectives and can only provide reasonable but not absolute assurance against material misstatement or loss.

The main features of the internal control system are as follows:

- · a control environment exists through the close management of the business by the executive directors. The Group has a defined organisational structure with delineated approval limits. Controls are implemented and monitored by personnel with the necessary qualifications and experience;
- · a list of matters reserved for board approval;
- · monthly management reporting and analysis of variances;
- financial risks for each major transaction are identified and evaluated by the Board; and
- standard financial controls operate to ensure that the assets of the Group are safeguarded and that proper accounting records are maintained.

By order of the Board

#### John Ward

Company Secretary

2 March 2015

## Directors' Remuneration Report

This report is non-mandatory for AIM-quoted companies and has been produced on a voluntary basis. It includes and complies with the disclosure obligations of the AIM Rules.

#### **Remuneration Committee**

The Company's remuneration policy is the responsibility of the Remuneration and Nomination Committee (the 'Committee'), which was established in October 2004. The terms of reference of the Committee are outlined in the Corporate Governance Statement on page 20. The members of the Committee are Paul Clegg (Chairman), Dr Bruce Campbell and Simon Shaw.

The Committee, which is required to meet at least twice a year, met six times during the year ended 31 December 2014. The Chief Executive Officer and certain executives may be invited to attend meetings of the Committee to assist it with its deliberations, but no executive is present when his or her own remuneration is discussed.

During the year, the Committee has been advised on director remuneration by its retained independent remuneration adviser, FIT Remuneration Consultants LLP. No other advice has been provided to the Group by this firm during the year.

#### **Remuneration policy**

#### (i) Executive remuneration

The Committee has a duty to establish a remuneration policy which will enable it to attract and retain individuals of the highest calibre to run the Group. Its policy is to ensure that the executive remuneration packages of executive directors and the fee of the Chairman are appropriate given performance, scale of responsibility, experience, and consideration of the remuneration packages for similar executive positions in companies it considers to be comparable. Packages are structured to motivate executives to achieve the highest level of performance in line with the best interests of shareholders. A significant element of the total remuneration package, in the form of bonus and long term incentive plan ('LTIP') awards, is performance driven.

Executive remuneration currently comprises a base salary, an annual performance-related bonus, LTIP participation, a pension contribution to the executive director's individual money purchase scheme (at 9% of base salary), family private health cover, permanent health and life assurance.

Salaries and benefits were reviewed during the third quarter of 2014, following the completion of the AstraZeneca out-licensing transaction, and taking into account Group and individual performance, external benchmark information and internal relativities. The previous review was in July 2012.

As a consequence of the 2014 review, the following changes were made with effect from 1 December 2014:

Changes will also be implemented for LTIP awards made to executive directors following the review, with such changes having effect for LTIP awards made from 2015. The effect of the changes will reduce the salary multiples for LTIP awards from a standard 100% to a range (dependent on pre-grant criteria to be established) of 50-75% of salary. We shall also take the opportunity for grants from 2015 to adopt the more normal approach of the Company bearing its own employers' NICs on any awards. This makes the proposed grant levels more comparable with a previous headline award level of 87% of salary (taking account of the impact of employers' NICs on awards) and, assuming an award at the middle of the 50-75% range, keeps the pound value of the shares being awarded unchanged for the CEO.

For completeness, a final LTIP award on the pre-review policy (awards over shares worth 100% of base salary) and reflecting pre-review salaries was made in November 2014.

The rationale for the 2014 review was that as the Company has moved to the next stage of its evolution through the AstraZeneca deal, it was appropriate to re-balance executive packages by:

- Reviewing salaries from levels which were previously largely unchanged from July 2007, but to set the revised salaries at levels which remain modestly below median in comparison to peer
- Taking the opportunity of this review to reduce bonus opportunity to a market median level of 100% and to normalise the level of LTIP awards

The next review of salaries and benefits will take place during the first quarter of 2016 with any change taking effect from 1 January 2016.

Directors' remuneration for the year ended 31 December 2014 is set out on page 26 of this document.

In addition to the 2014 review of remuneration, it should be noted that the Company's standard 10 year authority to operate its current LTIP plan will expire in late 2015, and accordingly the Company intends to seek authority from its shareholders to introduce a new LTIP plan at the 2015 AGM. The terms of the new LTIP plan (which will be summarised in the notice of AGM for the 2015 AGM) will retain a very high degree of consistency with the terms of the current LTIP plan (as described in paragraph (iv) on page 23), with only minor changes being made, such as clarifying that if an individual holding a performance-vested award leaves the group, he should have a period in which to exercise that vested award (other than in cases of misconduct).

		July 2012	2 to November 2014		Fr	om 1 December 2014
	Salary per annum (£000)	Employer pension contribution as a % of salary	Maximum bonus as a % of salary	Salary per annum (£000)	Employer pension contribution as a % of salary	Maximum bonus as a % of salary
Richard Marsden	130	9%	200%	180	9%	100%
Dr Phillip Monk	97	9%	200%	130	9%	100%
John Ward	118	9%	200%	140	9%	100%

## Directors' Remuneration Report (continued)

The policy for future LTIP awards from 2015 is as described above. Long term incentives remain an important element of the overall remuneration package and it is important for the Company to have a further 10 year period of authority from its shareholders in which to be able to offer LTIP awards.

#### (ii) Chairman and non-executive director remuneration

The Chairman and the non-executive directors receive a fixed fee of £25,000 per annum (prior to 1 December 2014, Dr Campbell and Professor Holgate received a fixed fee of £15,000 per annum). The fixed fee covers preparation for and attendance at meetings of the full Board and committees thereof. A fee of £5,000 per annum is also paid for chairing each of the audit and remuneration committees. The Chairman and the executive directors are responsible for setting the level of non-executive remuneration. The non-executive directors are also reimbursed for all reasonable expenses incurred in attending meetings.

#### (iii) Annual bonus plan

The Company operates a discretionary bonus scheme for executive directors for delivery of exceptional performance against personal and corporate objectives. As a consequence of the AstraZeneca transaction, the following bonuses were paid for the year ended 31 December 2014: Richard Marsden: £260,000; Dr Phillip Monk: £194,000; and John Ward: £237,000.

These payments represented awards at the then maximum level of 200% of base salary, but were calculated by reference to salary levels before the late 2014 review.

#### (iv) Equity-based incentive schemes

The Committee strongly believes that equity-based incentive schemes increase the focus of employees in improving Group performance, whilst at the same time providing a strong incentive for retaining and attracting individuals of a high calibre.

#### Long-Term Incentive Plan (LTIP)

The Synairgen Long-Term Incentive Plan, comprising conditional (performance-related) share awards (technically structured as nominal cost options pursuant to which participants must pay 1p per share on the exercise of their awards), was introduced in 2005 as the sole on-going long-term incentive vehicle for executive directors. Senior executives and other employees may be granted an award which will normally vest if demanding performance conditions are achieved over a three-year period and if the grantee remains an employee of the Group.

Grants under the LTIP in any financial year are capped at a maximum of 100% of base salary.

As explained above, in November 2014, Richard Marsden, Dr Phillip Monk and John Ward were granted awards over shares worth 100% of base salary, being the final award made under the allocation policy before the late 2014 remuneration review.

Executive directors are expected to retain no fewer than 50% of shares acquired upon vesting of awards under the LTIP, net of taxes, until such time as, in combination with any other shares the executives may have acquired, they hold shares with a value equivalent to 100% of base salary.

All awards will lapse at the end of the applicable performance period to the extent that the applicable performance criteria conditions have not been satisfied with no opportunity for retesting. In the event of a good leaver event or a change of control of the Company, the LTIP awards may vest early, but only to the extent that, in the opinion of the Committee, the performance conditions have been satisfied at that time. The awards will generally also be subject to a time pro-rated reduction to reflect the reduced period of time between the grant of the awards and the time of vesting although this reduction may not be applied in certain cases.

#### Performance conditions for the 2010, 2011, 2013 and 2014 LTIP awards

The performance conditions for all four awards were the same. The awards are subject to two conditions. Firstly, awards will only vest to the extent that the percentage increase in the total shareholder return ('TSR', being the return earned by a shareholder over the performance period in terms of change in the share price and assuming re-investment of any dividends in more shares at the prevailing price on the relevant ex-dividend date) of the Company over the three year performance period is equal or greater than the percentage increase in the techMARK mediscience™ index over the same period as follows:

mediscience™ index over the same period	subject to award
Less than 0%	0%
0%	25%
10%	50%
20%	100%
Performance between the steps	Pro-rata on a straight-line basis

Vesting percentage

of total number of shares

Secondly, no award will vest unless the average annual growth in the TSR of the Company over the performance period is equal to or greater than RPI plus 2% or, for more than 75% of an award to vest, annual average TSR must exceed RPI by at least 5% rather than 2%.

#### Vesting of 2011 LTIP awards

TSR growth over the performance period

less percentage increase in the techMARK

In September 2014, the awards granted in 2011 vested in full. The TSR growth over the three year performance period amounted to 114.00% and the percentage increase in the techMARK mediscience index over the same period was 83.14%, resulting in an outperformance by 30.86%, thus meeting in full the first performance condition. Similarly, this significantly exceeded the RPI plus 2% to 5% growth underpin.

#### Qualifying Non-Employee Option Scheme (QNEOS)

On 12 June 2009 shareholders in General Meeting approved the adoption of the QNEOS. This plan is a discretionary share scheme which enables the Committee to grant market value share options to consultants and non-executive directors who, in the opinion of the Committee, make, or, in the case of new appointments, will make, a significant contribution to the Group and where the Committee considers it to be in the interests of shareholders to make such grants.

During the year under review, options over 250,000 shares granted under the QNEOS in 2009 to a consultant of the Group were exercised at a price of 20p. During the year no options were granted under the ONEOS, and the ability to make further option grants (without a renewal of shareholders' authority to operate this plan) expired in June 2014. In 2015, the Committee intends to review whether to seek further shareholder authority to operate this plan.

#### (v) Service contracts and letters of appointment

The executive directors have entered into service agreements which can be terminated on six months' notice by either party.

For the period ended 5 March 2014, Richard Marsden continued to act as a non-executive director of Southampton Asset Management Limited but did not receive any fees with regards to this appointment. None of the other executive directors held non-executive directorships with other companies.

The Chairman and non-executive directors have entered into letters of appointment for an initial fixed period of twelve months, which renew automatically for a further twelve month period on the anniversary of commencement. The appointment can be terminated on three months' notice by either party.

#### **Directors' interests in share options**

The interests of directors in share options over ordinary shares during the year were as follows:

#### Synairgen Long-Term Incentive Plan

Date of grant	At 1 January 2014	Granted during the year	Exercised during the year	At 31 December 2014	Market price on date of exercise	Exercise price	Earliest exercise date	Expiry date
<b>Richard Marsden</b>								
7 September 2009	605,000	_		605,000	_	lp	7 Sept 2012	6 Sept 2019
8 September 2010	246,889	_	_	246,889	_	lp	8 Sept 2013	7 Sept 2020
21 September 2011	538,063	_	_	538,063	_	lp	$21\mathrm{Sept}2014$	$20\mathrm{Sept}2021$
11 March 2013	245,732	_	_	245,732	-	lp	11 Mar 2016	10 Mar 2023
3 November 2014	-	313,827	_	313,827	_	lp	3 Nov 2017	2 Nov 2024
Dr Phillip Monk								
7 September 2009	414,625	_	414,625	_	50p	lp	7 Sept 2012	6 Sept 2019
8 September 2010	183,637	_	183,637	_	50p	lp	8 Sept 2013	7 Sept 2020
21 September 2011	400,212	_	_	400,212	_	lp	21 Sept 2014	20 Sept 2021
11 March 2013	182,776	_	_	182,776	_	lp	11 Mar 2016	10 Mar 2023
3 November 2014	_	233,425	_	233,425	_	lp	3 Nov 2017	2 Nov 2024
John Ward								
7 September 2009	550,000	_	450,000	100,000	50p	lp	7 Sept 2012	6 Sept 2019
8 September 2010	224,445	_	_	224,445	_	lp	8 Sept 2013	7 Sept 2020
21 September 2011	489,148	_	_	489,148	_	lp	21 Sept 2014	20 Sept 2021
11 March 2013	223,393	_	_	223,393	-	lp	11 Mar 2016	10 Mar 2023
3 November 2014	_	285,297	_	285,297	-	lp	3 Nov 2017	2 Nov 2024

Options over 1,048,262 shares granted under the LTIP were exercised by directors during the year.

The total gain (before tax and brokers' fees) on LTIP options exercised by directors during the year was £513,648.

Dr Phillip Monk retained 133,118 ordinary shares following the exercise of LTIP options in 2014 in line with the Company's policy described above whereby 50% of shares acquired upon vesting of awards under the LTIP, net of taxes, must be retained until such time as executives hold shares with a value equivalent to 100% of base salary.

## Directors' Remuneration Report (continued)

#### Other options granted on or before the IPO or under the Synairgen plc Staff Option Scheme

Date of grant	At 1 January 2014	Exercised during the year	Lapsed during the year	At 31 December 2014	Market price on date of exercise	Exercise price	Earliest exercise date	Expiry date
Richard Marsden								
ll October 2004	280,000	280,000	_	_	50p	10p	11 Oct 2004	$10 \mathop{\rm Oct} 2014$
ll October 2004	140,000	140,000	_	_	50p	10p	30 June 2005	10 Oct 2014
26 October 2004	140,000	_	140,000	-	-	130p	30 June 2006	25 Oct 2014
26 October 2004	140,000	_	140,000	_	_	130p	30 June 2007	25 Oct 2014
Dr Phillip Monk								
2 October 2006	50,000	_	_	50,000	_	85.5p	2 Oct 2009	1 Oct 2016
John Ward								
26 October 2004	140,000	_	140,000	_	_	130p	$30\mathrm{June}2005$	$25 \operatorname{Oct} 2014$
26 October 2004	140,000	_	140,000	-	-	130p	30 June 2006	25 Oct 2014

Options over 420,000 shares granted before the IPO were exercised by directors during the year, resulting in a total gain (before tax and brokers' fees) of £168,000.

Accordingly, the aggregate gains (before tax and brokers' fees) made by directors on the exercise of share options in 2014 was £681,648.

The vesting and exercise of these other options is generally subject to the relevant option holder continuing to be an employee or director of a company in the same Group as the Company at the relevant time. There are no further performance criteria.

#### Synairgen Qualifying Non-Employee Option Scheme

Date of grant	At 1 January and 31 December 2014			Expiry date
lain Buchanan				
28 June 2010	212,765	23.5p	28 June 2013	27 June 2020
Paul Clegg				
7 September 2009	250,000	20p	7 Sept 2012	6 Sept 2019

The exercise of the options awarded in September 2009 (which vested in 2012) and in June 2010 (which vested in 2013) is subject to the rules of the scheme.

There were no other options granted to directors or which were exercised or lapsed during the year.

The mid-market price of the Company's shares at 31 December 2014 was 32.5p. During the year then ended, the mid-market price ranged from 32.5p to 71.0p. On 2 March 2015 the closing price was 27.5p.

#### **Audited information**

The following section (Directors' remuneration) contains the disclosures required by Schedule 5 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008, forms part of the financial statements for the year ended 31 December 2014 and has been audited by the Company's auditor, BDO LLP.

#### **Directors' remuneration**

The aggregate remuneration received by directors who served during the years ended 31 December 2014 and 2013 was as follows:

				Year ended 31 December 2014			Year ended 31 December 2013			
		Salary/			Total (excl.		Total (incl.	Total (excl.		Total (incl.
£000	Note	fee	Bonus	Benefits	pension)	Pension	pension)	pension)	Pension	pension)
<b>Executive Directors</b>										
Richard Marsden		134	260	2	396	12	408	132	12	144
Dr Phillip Monk	(i)	100	194	-	294	9	303	97	9	106
John Ward		120	237	2	359	11	370	120	11	131
Non-executive Directors										
Simon Shaw		30	_	-	30	_	30	30	_	30
Iain Buchanan		25	_	_	25	_	25	25	_	25
Dr Bruce Campbell	(ii)	16	-	_	16	-	16	15	_	15
Paul Clegg		30	_	_	30	-	30	30	_	30
Prof. Stephen Holgate		16	_	_	16	-	16	15	_	15
Total		471	691	4	1,166	32	1,198	464	32	496

- Dr Phillip Monk was the highest paid director during the year ended 31 December 2014 earning a total of £596,000, comprising emoluments as set out above of £303,000 and gains (before tax and brokers' fees) on the exercise of options amounting to £293,000. Richard Marsden was the highest paid director during the year ended 31 December 2013. He did not exercise any options during 2013.
- (ii) £15,000 was paid to IP2IPO Limited for the services of Dr Bruce Campbell.
- (iii) The total amount paid to third parties amounted to £15,000 (2013: £15,000).

In addition to the amounts shown above, the share-based payment charge for the period was:

	2014	2013
	£000	£000
Richard Marsden	46	58
Dr Phillip Monk	35	43
John Ward	42	53
lain Buchanan	-	2

Total share-based payment in respect of key management personnel amounted to £123,000 for the year ended 31 December 2014 (2013: £154,000).

By order of the Board

#### **Paul Clegg**

Chairman of the Remuneration and Nomination Committee

2 March 2015

# Statement of Directors' responsibilities in respect of the Annual Report and the Financial Statements

The directors are responsible for preparing the annual report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial period. Under that law the directors have elected to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and the Company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law). Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of the profit or loss of the Group for that period. The directors are also required to prepare financial statements in accordance with the rules of the London Stock Exchange for companies trading securities on the Alternative Investment Market.

In preparing these financial statements, the directors are required to:

- select suitable accounting policies and then apply them consistently;
- · make judgements and accounting estimates that are reasonable and prudent;
- · state whether they have been prepared in accordance with IFRSs as adopted by the European Union, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the financial statements comply with the requirements of the Companies Act 2006. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

#### Website publication

The directors are responsible for ensuring the annual report and financial statements are made available on a website. Financial statements are published on the Group's website in accordance with AIM rules for companies and legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Group's website is the responsibility of the directors. The directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

#### **Going concern**

The directors have prepared and reviewed financial forecasts. After due consideration of these forecasts and current cash resources, the directors consider that the Company and the Group have adequate financial resources to continue in operational existence for the foreseeable future (being a period of at least twelve months from the date of this report), and for this reason the financial statements have been prepared on a going concern basis.

By order of the Board

#### John Ward

Company Secretary 2 March 2015

# Independent Auditor's Report to the members of Synairgen plc

We have audited the financial statements of Synairgen plc for the year ended 31 December 2014 which comprise the Consolidated Statement of Comprehensive Income, the Consolidated Statement of Changes in Equity, the Consolidated Statement of Financial Position, the Consolidated Statement of Cash Flows, the Parent Company Balance Sheet and the related notes. The financial reporting framework that has been applied in the preparation of the group financial statements is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union. The financial reporting framework that has been applied in preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

#### Respective responsibilities of directors and auditors

As explained more fully in the statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors.

#### Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the FRC's website at www.frc.org.uk/auditscopeukprivate.

#### **Opinion on financial statements**

In our opinion:

- the financial statements give a true and fair view of the state of the group's and the parent company's affairs as at 31 December 2014 and of the group's profit for the year then ended;
- the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union;
- the parent company's financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

#### Opinion on other matters prescribed by the **Companies Act 2006**

In our opinion the information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

#### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- · adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements are not in agreement with the accounting records and returns; or
- · certain disclosures of directors' remuneration specified by law are not
- we have not received all the information and explanations we require for our audit.

#### Paul Anthony (senior statutory auditor)

For and on behalf of

#### **BDO LLP, statutory auditor**

Southampton United Kingdom

2 March 2015

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127)

## Consolidated Statement of Comprehensive Income

for the year ended 31 December 2014

Notes	Year ended 31 December 2014 £000	Year ended 31 December 2013 £000
	4,290	-
	(1,649)	(1,292)
	(1,547)	(986)
	(3,196)	(2,278)
4	1,094	(2,278)
6	31	11
	1,125	(2,267)
7	63	224
	1,188	(2,043)
8		
	1.42p	(2.72p)
	1.35p	(2.72p)
	4 6 7	31 December 2014 £000 4,290 (1,649) (1,547) (3,196) 4 1,094 6 31 1,125 7 63 1,188

## Consolidated Statement of Changes in Equity

for the year ended 31 December 2014

	Share	Share	Morgor	Retained	
	capital	premium	Merger reserve	deficit	Total
	£000	£000	£000	£000	£000
Note	18a	18b	18c	18d	
At 1 January 2013	752	19,422	483	(17,241)	3,416
Issuance of ordinary shares	-	_	-	-	-
Recognition of share-based payments	-	-	-	206	206
Total comprehensive loss for the year	_	-	-	(2,043)	(2,043)
At 31 December 2013	752	19,422	483	(19,078)	1,579
Issuance of ordinary shares	161	6,761	-	-	6,922
Transaction costs in respect of share issues	-	(412)	-	_	(412)
Recognition of share-based payments	_	_	-	159	159
Total comprehensive income for the year	-	-	-	1,188	1,188
At 31 December 2014	913	25,771	483	(17,731)	9,436

## Consolidated Statement of Financial Position

as at 31 December 2014

		31 December 2014	31 December 2013
	Notes	£000	£000
Assets			
Non-current assets		4	207
Intangible assets	9	102	297
Property, plant and equipment	10	17	15
		119	312
Current assets			
Inventories	11	56	199
Current tax receivable		55	190
Trade and other receivables	12	102	43
Other financial assets – bank deposits	13	6,752	458
Cash and cash equivalents	14	2,847	834
		9,812	1,724
Total assets		9,931	2,036
Liabilities			
Current liabilities			
Trade and other payables	15	(495)	(457)
Total liabilities		(495)	(457)
Total net assets		9,436	1,579
Equity			
Capital and reserves attributable to equity holders of the parent			
Share capital	17	913	752
Share premium	17	25,771	19,422
Merger reserve	18	483	483
Retained deficit	18	(17,731)	(19,078)
Total equity		9,436	1,579

The financial statements on pages 29 to 42 were approved and authorised for issue by the Board of directors on 2 March 2015 and signed on its behalf by:

#### **Richard Marsden**

Chief Executive Officer

#### John Ward

Finance Director

## Consolidated Statement of Cash Flows

for the year ended 31 December 2014

	Year ended 31 December 2014 £000	Year ended 31 December 2013 £000
Cash flows from operating activities		
Profit/(Loss) before tax	1,125	(2,267)
Adjustments for:		
Finance income	(31)	(11)
Depreciation	12	15
Amortisation	35	47
Loss on derecognised intangible asset	164	4
Share-based payment charge	159	206
Cash flows from operations before changes in working capital	1,464	(2,006)
Decrease/(Increase) in inventories	143	(127)
(Increase)/Decrease in trade and other receivables	(40)	32
Increase in trade and other payables	38	66
Cash generated from/(used in) operations	1,605	(2,035)
Tax credit received	198	244
Net cash generated from/(used in) operating activities	1,803	(1,791)
Cash flows from investing activities		
Interest received	12	15
Purchase of property, plant and equipment	(14)	(3)
Purchase of intangible assets	(4)	(16)
(Increase)/Decrease in other financial assets	(6,294)	973
Net cash (used in)/generated from investing activities	(6,300)	969
Cash flows from financing activities		
Proceeds from issuance of ordinary shares	6,922	-
Transaction costs in respect of share issues	(412)	-
Net cash generated from financing activities	6,510	-
Increase/(Decrease) in cash and cash equivalents	2,013	(822)
Cash and cash equivalents at beginning of the period	834	1,656
Cash and cash equivalents at end of the period	2,847	834

for the year ended 31 December 2014

#### 1. Accounting policies

#### **Basis of preparation**

The Group financial statements have been prepared in accordance with International Financial Reporting Standards, International Accounting Standards and Interpretations (collectively 'IFRSs') as adopted by the European Union ('Adopted IFRSs') and with those parts of the Companies Act 2006 applicable to companies preparing their financial statements under IFRSs.

The accounting policies adopted are consistent with those of the previous financial year.

The following amendments to standards and IFRIC interpretation have been adopted and are effective for the current year:

IFRS 10	Consolidated Financial Statements (Amendments – Investment Entities)
IFRS 11	Joint arrangements
IFRS 12	Disclosure of interests in other entities
IAS 32	Financial Instruments: Presentation (Amendments – Offsetting)
IAS 36	Impairment of Assets (Amendments – Recoverable Amount Disclosures)
IAS 39	Financial Instruments: Recognition and Measurement (Amendments – Novation of Derivatives)
IFRIC 21	Levies

The adoption of these pronouncements has not impacted the classification or measurement of the Group's assets and liabilities. However, as the result of the adoption of IFRS 12, additional disclosure is required in relation to interests in other entities.

#### New standards and interpretations not applied

IASB and IFRIC have issued the following relevant standards and interpretations with an effective date for periods commencing after 1 January 2014:

Standard or interpretation	Title	Effective for periods beginning on or after
IFRS 1	First-time Adoption of International Financial Reporting Standards (Annual improvements to IFRSs 2011-2013 Cycle – Meaning of effective IFRSs)	1 July 2014
IFRS 2	Share-based Payment (Annual Improvements to IFRSs 2010-2012 Cycle – Definition of vesting condition)	1 July 2014
IFRS 3	Business Combinations (Annual Improvements to IFRSs 2010-2012 Cycle – Accounting for contingent consideration)	1 July 2014
IFRS 3	Business Combinations (Annual Improvements to IFRSs 2011-2013 Cycle – Scope exceptions for joint ventures)	1 July 2014
IFRS 7	Financial Instruments: Disclosures (Annual Improvements to IFRSs 2012-2014 Cycle – Servicing contracts and applicability of offsetting amendments in condensed interim financial statements)	1 January 2016
IFRS 9	Financial Instruments (2014) provides option to early adopt the 'own credit' provisions	Can be applied until 31 December 2017
IFRS 10	Consolidated Financial Statements (Amendments – Sale or Contribution of Assets)	1 January 2016
IFRS 13	Fair Value Measurement (Annual Improvements to IFRSs 2010-2012 Cycle – short-term receivables and payables)	1 July 2014
IFRS 15	Revenue from Contracts with Customers	1 January 2017
IAS 16	Property, Plant and Equipment (Amendments – Acceptable Methods of Depreciation)	1 January 2016
IAS 24	Related Party Disclosures (Annual Improvements to IFRSs 2010-2012 Cycle – entities providing key management personnel services)	1 July 2014
IAS 27	Separate Financial Statements (Amendments – Equity Method in Separate Financial Statements)	1 January 2016
IAS 34	Interim Financial Reporting (Annual Improvements to IFRSs 2012-2014 Cycle – disclosure of information 'elsewhere in interim financial report')	1 January 2016
IAS 38	Intangible Assets (Amendments – Acceptable Methods of Amortisation)	1 January 2016

for the year ended 31 December 2014 (continued)

#### 1. Accounting policies (continued)

The directors do not anticipate that the adoption of the remaining standards and interpretations will have a material impact on the Group's financial statements in the period of initial application.

The effective dates stated here are those given in the original IASB/IFRIC standards and interpretations. As the Group prepares its financial statements in accordance with IFRS as adopted by the European Union (EU), the application of new standards and interpretations will be subject to their having been endorsed for use in the EU via the EU Endorsement mechanism. In the majority of cases this will result in an effective date consistent with that given in the original standard or interpretation but the need for endorsement restricts the Group's discretion to early adopt standards.

The Group financial statements are presented in Sterling.

#### **Basis of consolidation**

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company made up to the reporting date. Control is achieved when power can be exercised over the investee; there is exposure, or rights, to variable returns from involvement with the investee; and the ability to exercise power over the investee affects returns. All intra-group transactions, balances, income and expenses are eliminated on consolidation. Business combinations that took place prior to 1 July 2006, the date of transition to IFRS, have not been restated as permitted by IFRS 1 "First-time Adoption of International Financial Reporting". The consolidated financial statements have been prepared using the merger method of accounting.

#### Revenue

Revenue is stated net of value added tax and is recognised when products or services are supplied. Revenues from licensing agreements, including up-front and milestone payments, are recognised where the milestone has been accomplished, the payments are non-refundable, the Group's obligations to the revenues have been discharged and their collection is reasonably assured, and the transfer of risk has occurred.

#### **Research and development**

All ongoing research expenditure is currently expensed in the period in which it is incurred. Due to the regulatory and other uncertainties inherent in the development of the Group's products, the criteria for development costs to be recognised as an asset, as set out in IAS 38 "Intangible Assets", are not met until a product has been submitted for regulatory approval and it is probable that future economic benefit will flow to the Group. The Group currently has no such qualifying expenditure.

#### **Employee benefits**

All employee benefit costs, notably salaries, holiday pay, bonuses and contributions to Group stakeholder or personal defined contribution pension schemes are charged to the consolidated statement of comprehensive income on an accruals basis.

#### **Share-based payments**

Option awards and awards made under the Group's Long-Term Incentive Plan ('LTIP') granted after 7 November 2002 which had not vested by 1 July 2006 are fair valued and charged to the consolidated statement of comprehensive income over the period from grant to vesting. The Group has fairvalued option and LTIP awards using appropriate share valuation models. Options granted to non-employees are measured at the fair value of the goods or services received, except where the fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instrument granted. At each reporting date, the Group revises its estimate of the number of options that are expected to become exercisable. The credit for any charge is taken to equity.

#### **Intangible assets**

Intangible assets are stated at cost less any accumulated amortisation and any accumulated impairment losses. Patent and licence costs are amortised over ten years on a straight-line basis and the amortisation cost is charged to research and development expenditure in the consolidated statement of comprehensive income.

#### Property, plant and equipment

Property, plant and equipment are stated at cost less any accumulated depreciation and any accumulated impairment losses. Depreciation is provided on a straight-line basis at rates calculated to write off the cost of property, plant and equipment, less their estimated residual value over their expected useful lives, which are as follows:

Computer equipment: 3 years Laboratory and clinical equipment: 5 years

The carrying values of property, plant and equipment are reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable.

#### **Inventories**

Inventories are stated at the lower of cost and net realisable value.

for the year ended 31 December 2014 (continued)

#### 1. Accounting policies (continued)

#### **Financial instruments**

Financial assets and financial liabilities are recognised on the Group's consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

#### Financial assets

The Group classifies its financial assets as loans and receivables. These assets are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are initially recognised at fair value plus transaction costs that are directly attributable to their acquisition or issue, and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment. Impairment provisions are recognised when there is objective evidence (such as significant financial difficulties on the part of the counterparty or default or significant delay in payment) that the Group will be unable to collect all of the amounts due under the terms receivable; the amount of such a provision being the difference between the net carrying amount and the present value of the future expected cash flows associated with the impaired receivable.

The Group's loans and receivables comprise trade and other receivables, other financial assets and cash and cash equivalents in the consolidated statement of financial position. Other financial assets comprise short-term deposits not meeting the IAS 7 definition of a cash equivalent. Cash and cash equivalents includes cash in hand, deposits held at call with banks and other short-term bank deposits with a maturity period of three months or less from the date of initial deposit.

#### Financial liabilities

The Group classifies its financial liabilities as financial liabilities held at amortised cost. Trade payables are initially recognised at fair value and subsequently carried at amortised cost using the effective interest rate method.

#### **Leased assets**

Where substantially all of the risks and rewards incidental to ownership are not transferred to the Group (an 'operating lease'), the total rentals payable under the lease are charged to the consolidated statement of comprehensive income on a straight-line basis over the lease term.

#### **Taxation**

Income tax is recognised or provided at amounts expected to be recovered or to be paid using the tax rates and tax laws that have been enacted or substantively enacted at the reporting date. Research and development tax credits are included as an income tax credit under current assets.

Deferred tax balances are recognised in respect of all temporary differences that have originated but not reversed by the reporting date except for differences arising on:

- investments in subsidiaries where the Group is able to control the timing of the reversal of the difference and it is probable that the difference could not reverse in the foreseeable future; and
- the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit.

The amount of the asset or liability is determined using tax rates that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax liabilities/(assets) are settled/(recovered).

Recognition of deferred tax assets is restricted to those instances where it is probable that a taxable profit will be available against which the temporary difference can be utilised. Deferred tax balances are not discounted.

#### **Foreign currencies**

Transactions entered into by Group entities in a currency other than the currency of the primary economic environment in which they operate (their "functional currency") are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in the consolidated statement of comprehensive income.

The functional currency of all entities in the Group is Sterling.

#### 2. Critical accounting estimates and judgements

Critical accounting estimates, assumptions and judgements are continually evaluated by management based on available information and experience. As the use of estimates is inherent in financial reporting, actual results could differ from these estimates.

#### **Share-based payment**

The critical accounting estimates, assumptions and judgements underpinning the valuation of the option and LTIP awards are disclosed in note 17.

#### 3. Segmental analysis

The Group operates in one area of activity, namely drug discovery and development. All assets of the Group are located within the United Kingdom and all profits were generated in that territory.

for the year ended 31 December 2014 (continued)

#### 4. Profit/(Loss) from operations

The profit/(loss) from operations has been arrived at after charging:

	2014 £000	2013 £000
Depreciation of property, plant and equipment	12	15
Amortisation of intangible assets	35	47
Loss on derecognised intangible asset	164	4
Research and development expenditure	1,649	1,292
Operating lease rentals payable		
Land and buildings	81	81
Other operating lease rentals	93	93
The fees of the Group's auditor, BDO LLP, for services provided are analysed below:	2014 £000	2013 £000
Fees payable to the Company's auditor for the audit of the Group and Company financial statements	11	10
Fees payable to the Company's auditor for other services:		
The audit of the Company's subsidiary, pursuant to legislation	10	10
Audit-related assurance services	5	5
Tax compliance services	6	6
Tax advisory services	9	7
Total fees	41	38

#### 5. Employee benefit expense

The average monthly number of employees (including executive directors) was:

	2014	2013
Research	11	13
Administration	2	3
	13	16
Their aggregate remuneration comprised:	2014 £000	2013 £000
Wages and salaries	1,361	727
Social security costs	170	83
Pension costs – defined contribution plans	47	51
Total cash-settled remuneration	1,578	861
Accrued holiday pay	(4)	3
Share-based payment	159	204
Total remuneration	1,733	1,068

For the purpose of presentation in the Consolidated Statement of Comprehensive Income, remuneration costs of £767,000 (2013: £624,000) are included in research and development expenditure and £966,000 (2013: £444,000) are included in other administrative expenses.

#### Key management compensation

The directors represent the key management personnel and details of their remuneration are given in the Directors' Remuneration Report. In respect of directors' remuneration, the disclosures required by Schedule 5 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 are included in the detailed disclosures in the audited section of the Remuneration Report on page 26, which are ascribed as forming part of these financial statements.

for the year ended 31 December 2014 (continued)

#### 6. Finance income

For the years ended 31 December 2014 and 2013 Finance income represents bank interest receivable.

#### 7. Taxation

#### **Current tax**

	2014 £000	2013 £000
UK corporation tax credit on profit/loss for the year	(55)	(190)
Adjustment in respect of prior years	(8)	(34)
Total income tax credit	(63)	(224)
The tax assessed on the profit/loss on ordinary activities for the year is different to the standard rate of corporation tax in the UK of 21.50% (2013: 23.25%). The differences are reconciled below:	2014 £000	2013 £000
Profit/(Loss) on ordinary activities before tax	1,125	(2,267)
Profit/(Loss) on ordinary activities before tax multiplied by the standard rate of corporation tax in the UK	242	(527)
Effects of:		
Tax relief on share option exercises	(221)	-
Expenses not deductible for tax purposes	34	48
Enhanced research & development relief	(234)	(235)
Variable rates on tax losses surrendered for research & development tax credit	27	212
Movement in unrecognised losses and temporary differences	97	312
Overprovision in respect of previous years	(8)	(34)
Total tax credit for the current year	(63)	(224)

#### **Deferred taxation**

#### Changes in tax rates and factors affecting the future tax charge

Finance Act 2013 included provision for the main rate of corporation tax to reduce from 23% to 21% on 1 April 2014, and to 20% on 1 April 2015. This will reduce the Company's future tax charge accordingly. The rate changes were substantially enacted on the 17 July 2013. Accordingly, deferred tax balances have been recognised at 20%, being the rate of corporation tax expected to be in force at the time these timing differences are expected to reverse.

Recognised deferred taxation	2014 £000	2013 £000
Accelerated capital allowances	2	1
Other temporary differences	(2)	(1)
Charge for the year	-	-

#### Unrecognised deferred taxation

At 31 December 2014 the Group has trading losses carried forward which are available for offset against future profits of the Group amounting to £10,599,000 (2013: £10,676,000) and non-trading losses of £1,338,000 (2013: £1,084,000). At 31 December 2014 the Group has an unrecognised deferred tax asset in respect of these losses of £2,388,000 (2013: £2,352,000). The full utilisation of these losses in the foreseeable future is uncertain and no deferred tax asset has therefore been recognised.

In addition to the deferred tax asset on losses, the Group has a potential future tax deduction on share options of £1,151,000 (2013: £2,774,000) and a deferred tax asset of £230,000 (2013: £555,000) thereon. The additional tax deduction will crystallise at the point the options are exercised. As the utilisation of this additional deduction against taxable profits in the Group is uncertain, no deferred tax asset has been recognised in respect of the future tax deduction on share options.

The movement on the unrecognised deferred tax asset comprises the following:

	2014 £000	2013 £000
Unrecognised deferred tax asset at the start of the year	(2,907)	(2,840)
Movement in year	289	(67)
Unrecognised deferred tax asset at the year-end	(2,618)	(2,907)

for the year ended 31 December 2014 (continued)

## 8. Earnings/(Loss) per ordinary share

Basic earnings/(loss) per share ('EPS') is calculated by dividing the profit/(loss) attributable to ordinary equity holders of the parent company by the weighted average number of ordinary shares in issue during the year.

For diluted earnings per share, the weighted number of ordinary shares in issue is adjusted to assume conversion of dilutive potential ordinary shares, being share options where the exercise price is less than the average market price of the Company's ordinary shares during the year and where performance conditions have been met or, in the case of options where the performance period is not completed, are being met.

Where there is a loss (as for the year ended 31 December 2013), the loss attributable to ordinary shareholders and weighted average number of ordinary shares for the purpose of calculating the diluted earnings per ordinary share are identical to those used for basic loss per share. This is because the exercise of share options would have the effect of reducing the loss per ordinary share and is therefore antidilutive under the terms of IAS 33.

The earnings/losses and number of weighted average number of shares used in the calculations are as follows:

	Earnings £000	Shares 000	2014 EPS pence	Losses £000	Shares 000	2013 LPS pence
Basic earnings/(loss) per share	1,188	83,899	1.42	(2,043)	75,187	(2.72)
Effect of additional shares under option	-	4,279	(0.07)	-	-	-
Diluted earnings/(loss) per share	1,188	88,178	1.35	(2,043)	75,187	(2.72)

#### 9. Intangible assets

	Patent and licence costs £000
Cost	
At 1 January 2013	484
Externally-acquired additions	16
Derecognised assets	(23)
At 31 December 2013	477
Externally-acquired additions	4
Derecognised assets	(269)
At 31 December 2014	212
Amortisation	
At 1 January 2013	152
Derecognised assets	(19)
Charge for the year	47
At 31 December 2013	180
Derecognised assets	(105)
Charge for the year	35
At 31 December 2014	110
Net book amount	
At 31 December 2014	102
At 31 December 2013	297
At 1 January 2013	332

At 31 December 2014 £102,000 of the net book amount relates to interferon beta patent costs, which have a remaining average amortisation period of 5 years. At 31 December 2013 £119,000 of the net book amount related to interferon beta patent costs and £178,000 to interferon lambda patent and licence costs, with remaining amortisation periods of 6 and 7 years respectively. During 2014 as a consequence of the AstraZeneca transaction the Company terminated the interferon lambda licence and accordingly has derecognised the interferon lambda intangible assets.

for the year ended 31 December 2014 (continued)

## 10. Property, plant and equipment

	Computer equipment	Laboratory and clinical equipment	Total
	£000	£000	£000
Cost			
At 1 January 2013	42	132	174
Additions	2	1	3
At 31 December 2013	44	133	177
Additions	12	2	14
Derecognised assets	(25)	(9)	(34
At 31 December 2014	31	126	157
Depreciation			
At 1 January 2013	30	117	147
Charge for the year	6	9	15
At 31 December 2013	36	126	162
Derecognised assets	(25)	(9)	(34
Charge for the year	7	5	12
At 31 December 2014	18	122	140
Net book value			
At 31 December 2014	13	4	17
At 31 December 2013	8	7	15
At 1 January 2013	12	15	27
11. Inventories			
		2014 £000	2013 £000
Raw materials		56	199
Raw materials at 31 December 2014 comprises the Group's BioBank.			
12. Trade and other receivables			
Amounts receivable within one year:		2014 £000	2013 £000
Other tax and social security		18	6
Prepayments and accrued income		84	37
		102	43
13. Other financial assets – bank deposits			
Amounts receivable within one year:		2014 £000	2013 £000
Sterling fixed rate deposits of greater than three months' maturity at inception		6, <b>752</b>	£000 458
Sterning lived rate deposits of greater than three months maturity at inception	I	0,/32	438
14. Cash and cash equivalents			
		2014 £000	2013 £000
Cash available on demand		2,847	834
Cash available on acmana		2,047	034

for the year ended 31 December 2014 (continued)

#### 15. Trade and other payables

	2014 £000	2013 £000
Trade payables	78	20
Social security and other taxes	33	25
Accrued expenses and deferred income	384	412
	495	457

#### 16. Financial instruments

An explanation of the Group's objectives, policies and strategies for financial instruments and analysis of the capital structure and capital funding of the Group can be found on page 10 in the Financial Review.

Notes	2014 Book and fair value £000	2013 Book and fair value £000
Financial assets		
Loans and receivables		
Trade and other receivables (i)	51	6
Other financial assets (less than one year)	6,752	458
Cash and cash equivalents (less than one year)	2,847	834
Total	9,650	1,298
Financial liabilities		
Other financial liabilities		
Trade and other payables (less than one year) (ii)	450	417

Trade and other receivables shown above excludes prepayments, which are not a contractual obligation to receive cash, amounting to £51,000 (2013: £37,000).

The objective of holding financial instruments is to have access to finance for the Group's operations and to manage related risks. The main risks arising from holding these instruments are interest rate risk, liquidity risk, and credit risk.

#### Interest rate risk

Interest rate risk profile of financial assets, excluding short-term debtors:

	2014	2013
	Floating-rate	Floating-rate
	financial assets	financial assets
	£000	£000
Euro	93	-
Sterling	9,491	1,292
US Dollar	15	_
Total	9,599	1,292

Short-term deposits are placed with banks for periods of up to twelve months and are categorised as floating-rate financial assets. Contracts in place at 31 December 2014 had a weighted average period to maturity of 33 days and a weighted average annualised rate of interest of 0.65% (2013: 31 days, 0.52%).

Trade and other payables shown above excludes amounts due in respect of social security and other taxes and deferred income, which are not a contractual obligation to pay cash, amounting to £45,000 (2013: £40,000).

for the year ended 31 December 2014 (continued)

#### **16. Financial instruments** (continued)

#### Sensitivity analysis

It is estimated that a decrease of quarter of one percentage point in interest rates would have decreased the Group's profit before taxation by approximately £15,000 (2013: £5,000).

#### Liquidity risk

The Group's policy is to maintain adequate cash resources to meet liabilities as they fall due. All Group payable balances as at 31 December 2014 and 31 December 2013 fall due for payment within one year. Cash balances are placed on deposit for varying periods with reputable banking institutions to ensure there is limited risk of capital loss. The Group does not maintain an overdraft facility.

The Group's credit risk is attributable to its banking deposits. The Group places its deposits with reputable financial institutions to minimise credit risk.

#### 17. Share capital and premium

	Note	Number of shares	Ordinary shares of 1p each £000	Share premium £000	Total £000
At 1 January 2013		75,184,336	752	19,422	20,174
Issuance of ordinary shares	(i)	11,555	-	-	-
At 31 December 2013		75,195,891	752	19,422	20,174
Issuance of ordinary shares	(ii) - (vi)	16,120,780	161	6,761	6,922
Costs of issuance of shares		_	-	(412)	(412)
At 31 December 2014		91,316,671	913	25,771	26,684

<sup>(</sup>i) 11,555 ordinary shares of 1p were issued on 17 October 2013 at par following the exercise of share options under the Company's long term incentive plan (LTIP).

The total authorised number of ordinary shares is 125 million shares (2013: 125 million shares) with a par value of 1p per share (2013: 1p per share). All issued shares are fully paid.

<sup>(</sup>ii) 3,125,000 ordinary shares of 1p were issued on 10 March 2014 at a premium of 47p to provide working capital to progress the out-licensing of SNG001 through to a

<sup>(</sup>iii) 266,363 ordinary shares of 1p were issued on 18 June 2014 at par following the exercise of share options under the Company's LTIP.

<sup>(</sup>iv) 10,627,299 ordinary shares of 1p were issued on 11 July 2014 at a premium of 49p to enable the progression of new development opportunities. On the same day the following ordinary shares of 1p were issued following the exercise of share options: 1,285,819 at par (LTIP); 420,000 at a premium of 9p (options granted on 11 October 2004); and 250,000 at a premium of 19p (QNEOS).

<sup>(</sup>v) 4,712 ordinary shares of 1p were issued on 13 October 2014 at par following the exercise of share options under the Company's LTIP.

<sup>(</sup>vi) 141,587 ordinary shares of 1p were issued on 17 November 2014 at par following the exercise of share options under the Company's LTIP.

for the year ended 31 December 2014 (continued)

### 17. Share capital and premium (continued)

#### **Options**

At 31 December 2014 there were options outstanding over 5,467,644 un-issued ordinary shares, equivalent to 6.0% of the issued share capital,

Date of grant	Number of shares	Exercise price	Earliest exercise date	Latest exercise date
Approved EMI scheme				
12 May 2005	14,000	136.5p	12 May 2008	11 May 2015
2 October 2006	109,023	85.5p	2 October 2009	1 October 2016
29 October 2007	17,792	61.5p	29 October 2010	28 October 2017
Unapproved schemes				
7 September 2009 (LTIP)	705,000	1p	7 September 2012	6 September 2019
7 September 2009 (QNEOS)	250,000	20p	7 September 2012	6 September 2019
28 June 2010 (QNEOS)	212,765	23.5p	28 June 2013	27 June 2020
8 September 2010 (LTIP)	471,334	1p	8 September 2013	7 September 2020
21 September 2011 (LTIP)	1,742,550	1p	21 September 2014	20 September 2021
11 March 2013 (LTIP)	858,183	1p	11 March 2016	10 March 2023
3 November 2014 (LTIP)	1,086,997	1p	3 November 2017	2 November 2024
	5,467,644			

The Group has no legal or constructive obligation to repurchase or settle the options in cash. The movement in the number of share options is set out below:

	Number	2014 Weighted average exercise price	Number	2013 Weighted average exercise price
Outstanding at start of year	7,393,272	15.6p	7,511,635	15.6p
Granted during the year	1,086,997	1.0p	906,343	1.0p
Exercised during the year	(2,368,481)	4.6p	(11,555)	1.0p
Lapsed during the year	(644,144)	121.6p	(1,013,151)	2.6p
Number of outstanding options at year-end	5,467,644	5.0p	7,393,272	15.6p

At 31 December 2014, 3,522,464 share options were capable of being exercised, with exercise prices ranging from 1p to 136.5p (2013: 4,608,808, with exercise prices ranging from 1p to 136.5p). The options outstanding at 31 December 2014 had a weighted average remaining contractual life of 7.0 years (2013: 6.0 years). Vesting conditions are disclosed in the Directors' Remuneration Report.

for the year ended 31 December 2014 (continued)

#### 17. Share capital and premium (continued)

The Group uses a number of share-based incentive schemes as detailed opposite. The fair value per award granted and the assumptions are as follows:

Date of grant	Type of award	Number of shares	Exercise price (p)	Share price at date of grant (p)	Fair value per option (p)	Award life (years)	Risk free rate	Expected volatility rate	Performance conditions
12 May 2005	EMI	14,000	136.5p	135.5p	36.9p	5	4.35%	20%	None
2 Oct 2006	EMI	109,023	85.5p	85.5p	24.4p	5	4.75%	20%	None
29 Oct 2007	EMI	17,792	61.5p	61.5p	17.8p	5	4.95%	20%	None
7 Sept 2009	LTIP	705,000	1р	18.5p	7.1p	3	2.09%	30%	Market
7 Sept 2009	QNEOS	250,000	20p	18.5p	4.0p	5	2.67%	30%	Market
28 June 2010	QNEOS	212,765	23.5p	23.5p	5.6p	5	2.09%	30%	Market
8 Sept 2010	LTIP	471,334	1р	24.25p	12.1p	3	0.92%	40%	Market
21 Sept 2011	LTIP	1,742,550	1p	22.5p	13.4p	3	0.79%	56%	Market
11 Mar 2013	LTIP	858,183	1р	53p	30.9p	3	0.36%	44%	Market
3 Nov 2014	LTIP	1,086,997	1р	41.5p	22.4p	3	1.11%	46%	Market
		5,467,644							

In accordance with IFRS 2, the Company has applied IFRS 2 to all share-based payments granted after 7 November 2002 which had not vested by 1 July 2006. The following comments apply to those options which have been fair valued in accordance with IFRS 2:

- Stochastic valuation methodology was used for the LTIP awards and the QNEOS awards with market performance conditions and Black-Scholes methodology for the other awards.
- (ii) Expected dividend yield is nil, consistent with the directors' view that the Group's model is to generate value through capital growth rather than payment of dividends.
- (iii) The risk free rate is equal to the prevailing UK Gilts rate at grant date that most closely matches the expected term of the grant.
- (iv) The fair value charge is spread evenly over the expected vesting period.
- (v) The charge for the year ended 31 December 2014 for share-based payment amounted to £159,000 (2013: £206,000).

#### 18. Capital and reserves

#### 18a Share capital

Share capital represents the nominal value of shares issued.

#### 18b Share premium

Share premium represents amounts subscribed for share capital in excess of nominal value less the related costs of share issues.

#### 18c Merger reserve

The merger reserve represents the reserve arising on the acquisition of Synairgen Research Limited on 11 October 2004 via a share for share exchange accounted for as a Group reconstruction using merger accounting under UK GAAP.

The retained deficit represents cumulative net gains and losses recognised in the consolidated statement of comprehensive income, adjusted for cumulative recognised share-based payments.

#### 19. Related party transactions and balances

Details of key management personnel and their compensation are given in note 5 and on page 26 of the Directors' Remuneration Report.

# Parent Company Balance Sheet

as at 31 December 2014

## Company number: 5233429

	Notes	31 December 2014 £000	31 December 2013 £000
Fixed assets		2000	2000
Investments	5	17,763	19,557
Current assets			
Debtors	6	39	4
Investments: short-term deposits		6,752	458
Cash at bank and in hand		2,709	789
		9,500	1,251
Creditors: amounts falling due within one year	7	(69)	(29)
Net current assets		9,431	1,222
Total assets less current liabilities		27,194	20,779
Capital and reserves			
Called up share capital	8	913	752
Share premium account	8	25,771	19,422
Profit and loss account	9	510	605
Shareholders' funds	9	27,194	20,779

The financial statements on pages 43 to 46 were approved and authorised for issue by the Board of directors on 2 March 2015 and signed on its behalf by:

#### **Richard Marsden**

Chief Executive Officer

#### John Ward

Finance Director

## Notes to the Parent Company Financial Statements

for the year ended 31 December 2014

#### 1. Basis of preparation

Synairgen plc's Parent Company balance sheet has been prepared under the historical cost convention and in accordance with UK Generally Accepted Accounting Practice ('UK GAAP').

As permitted by FRS 1 "Cash Flow Statements", no cash flow statement for the Company has been included on the grounds that the Group includes the Company in its own published consolidated financial statements. The Company has taken advantage of the exemption in FRS 8 "Related Party Disclosures" not to disclose related party transactions with wholly-owned subsidiaries.

#### 2. Accounting policies

The following accounting policies have been applied consistently in dealing with items which are considered material to the Company's financial statements.

#### Investment in subsidiary undertakings

Investments in subsidiary undertakings where the Company has control are stated at cost less any provision for impairment. Control is achieved where the Company has the power to govern the financial and operating policies of an investee entity so as to obtain benefits from its activities.

#### **Short-term deposits**

Short-term deposits comprise deposits with UK banks for periods of up to twelve months. Short-term deposits are measured initially at cost and subsequently at cost or recoverable amount if lower. Interest is accrued evenly on an accruals basis.

#### **Share-based payments**

When the Company grants options over equity instruments directly to the employees of a subsidiary undertaking, the effect of the sharebased payment is capitalised as part of the investment in the subsidiary as a capital contribution, with a corresponding increase in equity.

#### **Taxation**

The charge for taxation is based on the loss for the period and takes into account taxation deferred.

Current tax is measured at amounts expected to be paid using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Deferred tax balances are recognised in respect of all timing differences that have originated but not reversed by the balance sheet date, except that the recognition of deferred tax assets is limited to the extent that the Company anticipates making sufficient taxable profits in the future to absorb the reversal of the underlying timing differences.

Deferred tax balances are not discounted.

#### 3. Loss attributable to members of the Parent Company

As permitted by Section 408 of the Companies Act 2006, the Company's profit and loss account has not been included in these financial statements. The loss dealt with in the financial statements of the Parent Company for the year ended 31 December 2014 was £254,000 (2013: loss of £224,000).

#### 4. Directors' remuneration

The only employees of the Company are the executive directors and all their costs are borne by its subsidiary undertaking.

In respect of directors' remuneration, the disclosures required by Schedule 5 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 are included in the detailed disclosures in the audited section of the Directors' Remuneration Report on page 26, which are ascribed as forming part of these financial statements.

# Notes to the Parent Company Financial Statements

for the year ended 31 December 2014 (continued)

#### 5. Investments

	Investment in subsidiary undertaking £000	Loan to subsidiary undertaking £000	Capital contribution £000	Total £000
At 1 January 2014	140	18,296	1,121	19,557
(Repayments)/Additions	-	(1,953)	159	(1,794)
At 31 December 2014	140	16,343	1,280	17,763

At 31 December 2014, the Company has an investment in the following subsidiary undertaking:

Name of company	Country of incorporation	Proportion of voting rights and ordinary share capital held	Nature of business
Synairgen Research Limited	England	100%	Drug discovery and development

#### 6. Debtors

	2014 £000	2013 £000
Other tax and social security	7	2
Prepayments and accrued income	32	2
	39	4

All amounts fall due for payment within one year.

## 7. Creditors: amounts falling due within one year

	2014 £000	2013 £000
Trade creditors	27	5
Accruals and deferred income	42	24
	69	29

### 8. Share capital and share premium

Details of the Company's share option schemes and LTIP can be found in note 17 to the Group accounts on pages 41 and 42.

# Notes to the Parent Company Financial Statements

for the year ended 31 December 2014 (continued)

### 9. Reconciliation of movements in reserves and shareholders' funds

At 31 December 2014	913	25,771	510	27,194
Share-based payment credit		-	159	159
Loss for the year	-	-	(254)	(254)
Transaction costs in respect of share issues	-	(412)	-	(412)
Issuance of ordinary shares	161	6,761	-	6,922
At 31 December 2013	752	19,422	605	20,779
Share-based payment credit	-	-	206	206
Loss for the year	-	-	(224)	(224)
Issuance of ordinary shares	-	-	-	-
At 1 January 2013	752	19,422	623	20,797
	Share capital £000	Share premium account £000	Profit and loss account £000	Shareholders' funds £000

# Corporate Directory

#### **Company number** 5233429

#### **Directors**

Executive: Richard Marsden, Dr Phillip Monk, John Ward

Non-executive: Simon Shaw (Chairman), Iain Buchanan, Dr Bruce Campbell, Paul Clegg, Prof. Stephen Holgate

#### Secretary

John Ward

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Tremona Road, Southampton SO16 6YD Telephone and fax: +44 (0) 2380 512 800

#### Website

www.synairgen.com

#### E-mail

info@synairgen.com

#### **Advisers**

#### **Independent auditor BDO LLP**

Arcadia House, Maritime Walk, Ocean Village, Southampton SO14 3TL

#### **Bankers**

#### **HSBC** Bank plc

165 High Street, Southampton SO14 2NZ

#### Financial public relations

**Consilium Strategic Communications** 

41 Lothbury, London EC2R 7HG

#### Nominated adviser and broker FinnCap Limited

60 New Broad Street, London EC2M 1JJ

#### Registrars

#### **Capita Asset Services**

The Registry, 34 Beckenham Road, Beckenham, Kent BR3 4TU

#### **Solicitors**

#### Fasken Martineau LLP

17 Hanover Square, London W1S 1HU

## Glossary

#### Acute

An acute disease is a disease with a rapid onset and/or a short course

#### **Adenovirus**

A virus that can cause respiratory disease (e.g. the common cold), conjunctivitis and gastroenteritis

#### Airways (or bronchial tubes)

The tubes that carry air in and out of the lungs

#### Allergen

A type of antigen that produces an abnormally vigorous immune response

#### Antibiotic

A drug that inhibits bacterial growth or kills bacteria

#### Anti-viral

Any substance that can either destroy viruses or suppress their growth

#### **Apoptosis**

A naturally-occurring form of programmed cell death

#### Assay

A laboratory test to determine parameters such as the strength of a solution, the proportion of a compound in a mixture, the potency of a drug or the purity of a preparation

#### **Asthma**

A disorder in which the airways become episodically narrowed, leading to wheeze, shortness of breath, cough and chest tightness

#### **BioBank**

A collection of samples from clinicallycharacterised volunteers, comprising blood, induced sputum, bronchial biopsies and epithelial cells. These samples are used to develop the complex in vitro human disease models

#### **Biomarker**

A biomarker is a biochemical feature or facet that can be used to measure the progress of disease or the effects of treatment

#### **British Thoracic Society (BTS)** Step classification system

A stepwise treatment regime (from steps 1 to 5, with 5 being the most severe) for treating asthma in Britain, aiming to achieve optimum control without excessive medication

#### **Broad spectrum antibiotic**

An antibiotic that acts against a wide range of disease-causing bacteria

#### **Bronchodilators**

Medicines which relax the muscles around the airways, helping the airways to open up, so making it easier to breathe. There are several types of bronchodilators, of which shortacting beta-agonist drugs are the most commonly used

#### **Bronchospasm**

A sudden contraction of airway smooth muscle resulting in a narrowing of the airwavs

#### **Chronic bronchitis**

An inflammation of the airways accompanied by coughing and production of phlegm. The symptoms are present for at least three months in each of two consecutive years. See COPD

#### **Chronic disease**

A persistent or long-lasting condition

## **Clinical Trial Authorisation or CTA**

An authorisation from the MHRA to conduct a clinical trial

Chronic obstructive pulmonary disease covers two conditions: chronic bronchitis and emphysema. COPD usually results from long-term exposure to irritants to the lungs, of which the most prevalent is tobacco smoke. Unlike asthma, where airflow obstruction varies, in COPD airflow obstruction is usually irreversible

#### Coronavirus

A virus that can cause respiratory disease such as the common cold or SARS (depending on the type of coronavirus) and gastroenteritis

#### DNA

Nucleic acid that carries genetic information in the cell

#### **Emphysema**

A destructive process involving the air spaces (alveoli) of the lungs, which leads to over-inflation of the lung and, when sufficiently advanced, causes breathlessness. and lack of oxygenation of blood. See COPD

#### **Eosinophil**

A type of white blood cell that has a role in allergy and asthma

#### **Epithelium**

In the lung, the epithelium is a thin layer of cells which lines the airway tubes in order to protect and regulate the tissue underneath

#### Exacerbation

A rapid deterioration of a chronic disease that makes the symptoms worse

#### Gene

A hereditary unit consisting of a sequence of DNA that determines a particular characteristic of a living organism

#### IFN-β

Interferon beta is a natural protein found in the body which helps to regulate the immune system and fight off viruses. IFN-β is currently marketed by a number of companies as an injectable therapy for the treatment of multiple sclerosis

#### Influenza

A contagious viral infection of the respiratory tract, leading to fever, headaches, sore throat, congestion of the nose and body aches

#### In vitro

Carried out in the laboratory, e.g. in a test tube or culture plate

#### In vitro model (complex)

A research model which contains more than one cell type and allows the study of interactions between different cell types and 'test' agents relevant to the disease or a therapy

#### Long acting beta agonist

An asthma drug that acts to relax (open) the airways for 12 or more hours

#### Lower airway

The airway tubes in the lung running from the throat down, ending in the air spaces (alveoli) where gas exchange occurs

### Macrophages

Phagocytic (i.e. cells that can engulf other cells and cell components) white blood cells involved in cellular clearance and inflammation

#### **MHRA**

The Medicines and Healthcare Products Regulatory Agency; a UK government body tasked with ensuring that medicines and medical devices work and are safe

#### Morbidity

Incidence or prevalence of a disease

#### Mucus

A gelatinous substance normally produced by the airway cells to protect and hydrate the airway surface from harmful agents

#### Multiple sclerosis (MS)

A disease affecting nerves in the brain and spinal cord, causing problems with muscle movement, balance and vision

#### Pandemic influenza

An influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity. resulting in epidemics worldwide with enormous numbers of deaths and illness

#### Parainfluenza

A virus that can cause the common cold. Parainfluenza is also responsible for 75% of croup cases in children

#### **Patent Cooperation Treaty** or PCT

A system by which a patent application can be filed in many different countries at once. A single international application is filed initially at a receiving office. After a search and publication, the application may be converted to a series of national applications in different countries

#### **Pathway**

A signalling pathway is a group of molecules that work together in a cell to control one or more cell functions

#### Peak expiratory flow

A lung function test that measures a person's ability to breathe out air

#### Personalised/P4/stratified medicine

The customisation of healthcare to the individual patient

#### **Phase I Clinical Trial**

A study conducted in volunteers to determine the biological effects of a drug, especially safety and tolerability

#### **Phase II Clinical Trial**

A study in patients with the aim of making a preliminary determination of the efficacy of a drug to provide proof of concept and/or to study drug dose ranges

#### **Phase IIa Clinical Trial**

Used to describe a Phase II clinical trial evaluating efficacy, adverse effects and safety risks

#### **Phase IIb Clinical Trial**

Used to describe a subsequent Phase II clinical trial that also evaluates dosage tolerance and optimal dosage frequency in a larger number of patients than enrolled in a Phase IIa trial

#### **Phase III Clinical Trial**

A full scale clinical trial to determine drug efficacy and safety prior to seeking marketing approval

#### **Phlegm**

See Sputum

#### Placebo

An inactive substance or preparation used as a control/ comparator (in a clinical trial for example) to determine the effectiveness of a medicinal drug

#### Primary endpoint

The most important measure (endpoint) assessed in a clinical trial

#### Prognostic biomarker

A biomarker that can predict the future course of a disease or response to a therapy

#### **Prophylaxis**

A measure taken for the prevention of a disease or condition

#### Protein

Large molecules made of smaller biological units known as 'amino acids'. Proteins are responsible for the majority of the function and much of the structure of living things, including humans

#### **Pulmonary**

Relating to, functioning like, or associated with the lungs

#### Rhinovirus

Rhinoviruses are the most common viral infective agents in humans. The most well known disease caused by rhinoviruses is the common cold

Nucleic acid that is involved in protein synthesis and transmission of genetic information

Respiratory syncytial virus (RSV) can cause both mild respiratory illness (e.g. the common cold) and serious respiratory tract infections (such as bronchiolitis and pneumonia). More severe infections can occur in the very young, the very old and those with weakened immune systems

#### Safety study

See Phase I Clinical Trial

# Glossary (continued)

#### Seasonal Influenza

Seasonal flu is a yearly outbreak of flu infection, caused by a flu virus. The seasonal flu is somewhat different every year, as flu viruses are always changing

#### Secondary/exploratory endpoint

The second most important (or additional) measure (or endpoint) assessed in a clinical trial

#### Severe asthma

Asthma which requires treatment with high dose inhaled corticosteroids plus a second controller (and/or systemic corticosteroids) to prevent it from becoming 'uncontrolled' or which remains 'uncontrolled' despite this therapy

#### SG004

A double-blinded, placebocontrolled, single and multiple dose-escalating Phase I study to assess the safety and tolerability of inhaled IFN-β in controlled asthmatic male and female subjects

#### SG005

A randomised, double-blinded, placebo-controlled Phase II study, comparing the efficacy and safety of inhaled IFN-β to placebo administered to asthmatic subjects after the onset of a respiratory viral infection for the prevention or attenuation of asthma symptoms caused by respiratory viruses

#### Sputum

The thick mucus that is coughed up by a person. Sputum contains cells and soluble substances secreted into the airways (bronchi), some of which can mediate disease if present in amounts different to normal. Sputum is also commonly called phlegm

#### Steroids

A group of chemicals that is produced naturally in the body by the adrenal gland. In asthma, steroids are given by inhalation or by mouth to reduce the inflammation of the airways

#### Systemic absorption

The fraction of drug that reaches the systemic circulation

#### **Upper airway**

The tubes in the nose and neck that conduct air into the lung

#### Translational medicine

The process of converting a scientific discovery into something that aims to improve the health of individuals and the community

#### Type I IFNs

A classification of interferon that includes IFN-β

A virus is a non-living small particle that infects cells in biological organisms. Viruses can reproduce only by invading and controlling other cells as they lack the cellular machinery for self-reproduction

#### Wheeze

A whistling sound made by a person who has airflow obstruction when breathing

# synairgen plc